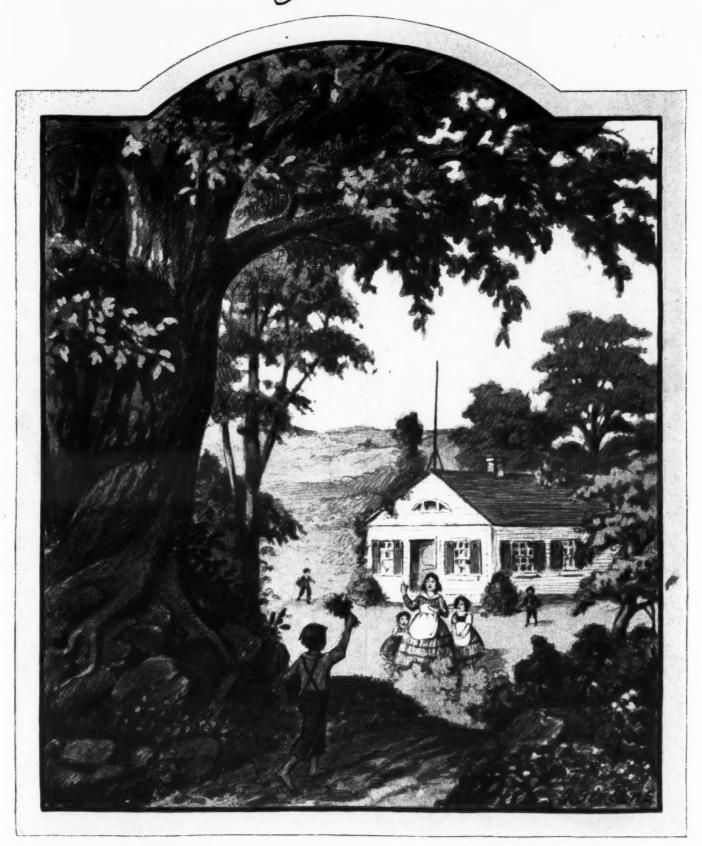
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# THE AMERICAN School Board Journal

A PERIODICAL 9 SCHOOL ADMINISTRATION.

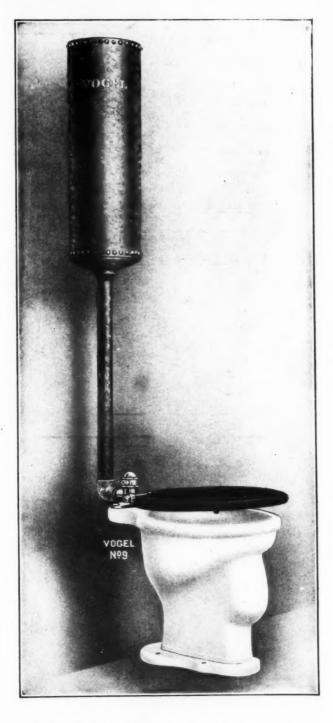


November, 1927

The Bruce Publishing Company, Milwaukee, Wis.



#### Number 9 Automatic School Water Closet



This closet is made to stand the rough usage of the school water closet.

Economical in the use of water.

Seldom requires repairs.

Easy of access when repairs are necessary.

The simplest and most durable automatic water closet.

Many Thousands in use.

Sold by Wholesalers of Plumbing Supplies Everywhere

JOSEPH A. VOGEL CO.

Wilmington, Delaware

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#### NO WEAR-OUT! NO DEPRECIATION!

#### NATURAL SLATE BLACKBOARDS ARE ALWAYS LIKE NEW

The first cost of Natural Slate Blackboards is their only cost. That's why school authorities, builders, and architects throughout the country, in most every case, insist that the boards are of Natural Slate.

In Young America's Schools, hard usage is inevitable. Natural Slate Blackboards meet all requirements. Select Natural Slate for that next Blackboard Installation.

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The Johnson Dual Thermostat System Of Heat Control automatically maintains in each room of the school building any predetermined constant temperature during the day, regardless of outdoor weather conditions and changes—and a lower predetermined constant temperature at night:

Automatically turns off the steam in all rooms at a stipulated hour of the day's end, but leaves the steam on, or available, in those rooms used at night; next morning at a stipulated hour automatically turns on the steam in all rooms for the day:

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# Theodore Roosevelt ... High School ...

Minneapolis

#### Equipped with Johnson Heat Control

Being entirely of metal, including metal diaphragms and Sylphon bellows, Johnson Valves, for example, are guaranteed for 10 years—but will endure a life-time under usual use. The entire Johnson System is likewise of metal construction—furnishing a per-

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Hundreds of schools in all parts of America are equipped with Johnson Heat Control. Arrange now to have your schools equipped with Johnson Heat Control.

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AUTOMATIC TEMPERATURE
REGULATION SINCE 1885

BRANCHES IN ALL
PRINCIPAL CITIES.



# KEWANEE STEEL Riveted DOILERS



## Low

With a boiler, "it's not the original cost, but the upkeep that counts" and that's no mistake.

# Heating

It is a mistake to think that the first cost of a cheap boiler is the last amount that will have to be paid. Because, if the first cost is too low then the upkeep cost is going to be too high which adds extras to the purchase price every heating season.



## Cost

When you buy a Kewanee Steel-Riveted Boiler your boiler bill is paid in full but once in a life time, without additions for repairs and wasted fuel. Whereas with a "bargain" boiler only a first down payment has been made on the heating equipment. The next installment is added to the first bill for fuel and another installment is added to every subsequent bill for coal or oil each heating season.



#### KEWANEE BOILER COMPAN

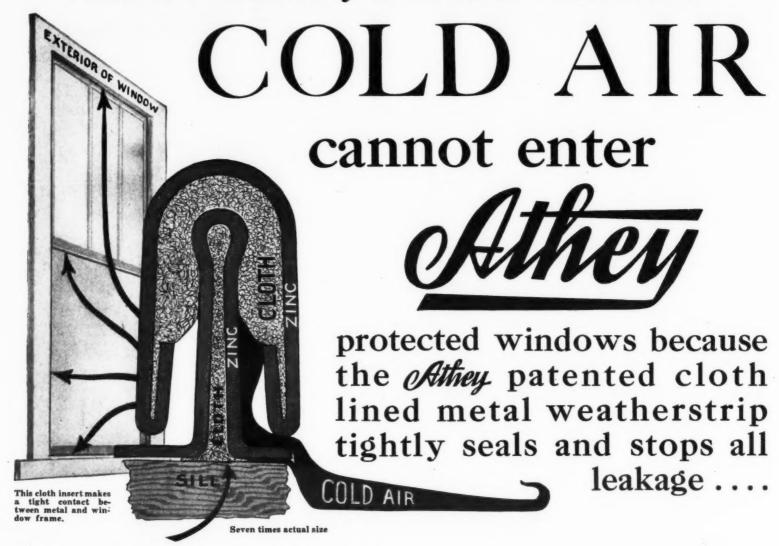
Kewanee, Illinois

Branches in Most Leading Cities

STEEL HEATING BOILERS RADIATORS WATER HEATERS TANKS AND WATER HEATING GARBAGE BURNERS

# It pays Schools

The heating plant will be large enough and it will be easy to control ventilation.



ATHEY Cloth-to-Metal contact weatherstrips change any wood or steel window from a rattling, loose, drafty sash to one that works smoothly and quietly and is absolutely draft-proof when closed.

Why force the Heating Plant by trying to heat all outdoors when a simple ATHEY installation quickly pays for itself with the saving in fuel?

#### One large building saved 572 tons of coal in 5 months

A prominent firm of New York architects made exhaustive tests of various well known mechanical devices for reducing air leakage through windows. They found that ATHEY cloth-lined metal weatherstrips were eleven times superior in reducing leakage over non-weatherstripped windows and more than four times as efficient as the best of other installations.



ATHEY WEATHERSTRIPPED BUILDINGS WITH LOW COAL BILLS AND COMFORTABLE TENANTS

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The saving in fuel quickly pays for Atheyizing.

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TOO NEW TO
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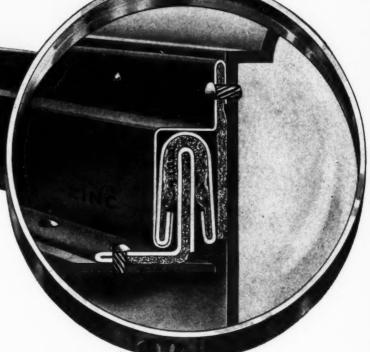


Illustration showing how ATHEY cloth lined metal weatherstrips are quickly attached to steel windows and frames.



Perennial Window Shades
Cloth-Lined Metal Weatherstrips
Athey Disappearing Partition
Athey Skylight Shades

#### Send for this New Athey Book

It contains valuable information for any building owner or manager, architect or engineer desiring to save fuel, prevent drafts, and increase comfort.



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#### SPENCER CENTRAL SYSTEMS



Theodore Roosevelt Junior High School, Springfield, O. Wm. C. Findt, Architect.

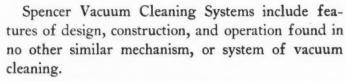


South Side High School, Rockville Center, L. I., N. Y.

Huse Templeton Blanchard, Architect.

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The recommendations of our Engineering Department may be obtained on any cleaning problem without cost or obligation.



The Spencer Swivel tool, the ball bearing elbow joint and the clincher coupling are all Spencer inventions, the result of thorough and careful study of the problem together with several years of practical experience.

The swivel tool enables the operator to reach under desks and chairs and into seemingly inaccessible corners.

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The clincher coupling avoids all marring and injury to floors, furniture, etc., also avoids trouble incident to injury of metal couplings and their consequent failure to couple.

A system of rugged construction—the Spencer is a machine of great simplicity and durability. There are no valves, belts or other complicated parts requiring constant adjustments or repairs. The cleaning appliances and tools are few, simple and strong—all wearing surfaces easily, quickly and inexpensively replaced.

Write for list of school installations and complete data regarding Spencer equipment.

THE SPENCER TURBINE COMPANY HARTFORD, CONNECTICUT



# Dry Steam Under Forced Firing!

Only 0.93% moisture in separator box at the peak of this remarkable operating test.

From whatever standpoint the Mark Hopkins Hotel test is considered, the showing of Pacific Boilers attracts the attention of heating men.

For example, at no time during the test was there more than 1.243% of total feed water in the separator box. When the boiler developed 152.4% of capacity, it was only 0.93%! And there wasn't a sign of priming.

These figures are all the more significant because they come, not from a factory or laboratory test, but from an actual operating test on a notable installation, after five months of service. Complete data, certified by Leland and Haley, consulting engineers, are included in an interesting booklet describing the test. Write for it today.





PACIFIC STEEL HEATING BOILERS

FACTORIES: WAUKEGAN, ILL., BRISTOL, PA.

# Von Auprin

Self-Releasing Fire Exit Latches

Sweets, Pages B1876-1879.

AIA 27c5

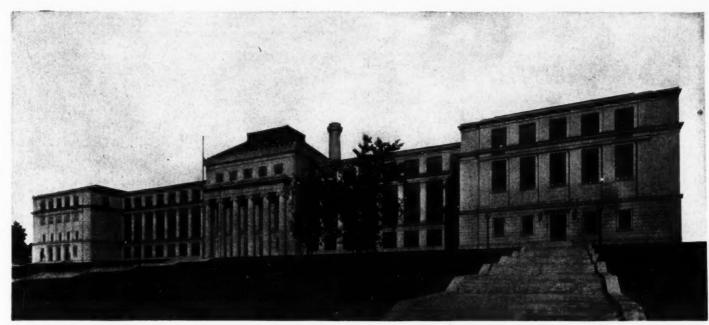
Protection against panic fatalities is so simple, so easily accomplished.

Just a few more words on the specification sheet.

ADDA

VONNEGUT HARDWARE CO. Indianapolis, Ind. 1852 Anniversary 1927





Architect: Robert Maurice Trimble

TAYLOR ALDERDICE HIGH SCHOOL Pittsburgh, Pa.

Equipped with Columbia Window Shades & Rollers

# All cards on the table

COLUMBIA Mills offers the school executive a window shade proposition that is entirely open and above board. No need to try and exaggerate the merits of our famous Damasko Heavy Duty Shade Cloth.

Here you have a window shade made expressly for the careless handling and rough treatment which is the common lot of school window equipment. The cloth is an exceptionally tough grade of heavy duty, free from filling cambric—closely-woven, firm-textured. It is guaranteed not to crack, peel, show pinholes or stretch out of shape. Colors are absolutely fade-proof.

But don't take our word for it. Let us refer you to a few of the hundreds of American schools in which Damasko Shade Cloth is doing Heavy Duty.

In scores of these Damasko installations, the yearly repair expense is averaging as low as 25 cents for each \$100 of original investment.

Isn't that the type of window shade proposition into which you can put your money with complete confidence?

The Columbia Mills, Inc.

Baltimore Boston Chicago Cincinnati Cleveland Dallas Detroit Fresno Kansas City Los Angeles Minneapolis New Orleans Philadelphia Pittsburgh Portland (Ore.) St. Louis Salt Lake City San Francisco Seattle



Window shades always pull up and down easily and noiselessly when mounted on Columbia Rollers. This is due to an exclusive Columbia device which makes the roller entirely self-lubricating.

#### Your Time Saver

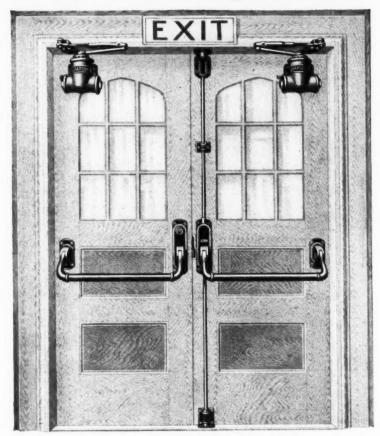
You can save time and trouble by using the "Standard Specification for Window Shades," which we'll gladly send on request. A specimen roller and samples of Columbia Cloth are sent with the specification. Just fill in coupon and mail to The Columbia Mills, Inc., 225 Fifth Ave., New York.

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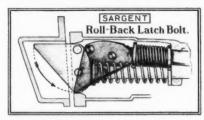




#### A new fire-exit latch bolt that can't be jammed



Not even the pressure of a panic-driven crowd can make the Sargent roll-back latch stick



School officials, who are responsible for the protection of the lives of the pupils and are anxious to make proper provision for quick exit in case of fire or panic will be interesed in this new development which has become the standard Roll-Back action for

#### SARGENT

Fire Exit Door Bolts.

The improved action is shown by the detailed drawing. The Cross Bar does not withdraw the bolts, but releases the deadlocking mechanism, allowing the bolts to be rolled back into the case of the lock as the doors are pushed open.

#### Security.

The Latches provide complete security and prevent entrance from the outside of the building when the school is not in session, while they can be arranged to permit entrance during school hours if desired.

#### Quick Exit At All Times.

is provided and in case of necessity the doors can be instantly opened by slight pressure on the handle Bars at any point.

#### Door Closers

close the doors, during their day by day use, quickly and quietly, the application shown in the illustration with the Sargent special foot (No. 35) being particularly desirable.

Pamphlet illustrating and describing Fire Exit Door Bolts will be mailed upon request.

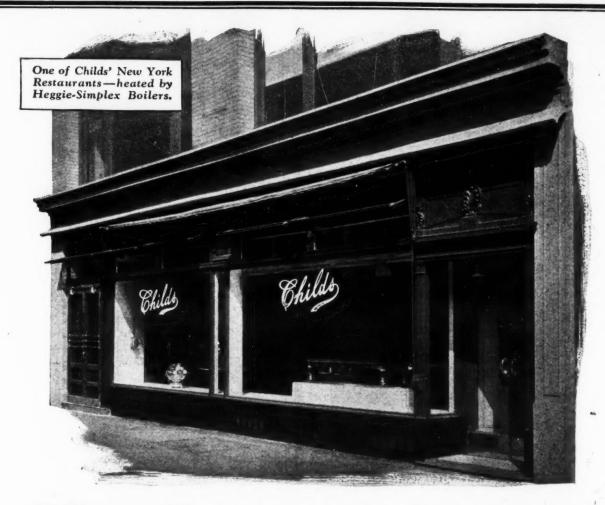
Sargent Fire Exit Door Bolts, Locks and Hardware are sold by representative dealers in all cities.

#### **SARGENT & COMPANY**

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# Where Heating is as Important as Eating

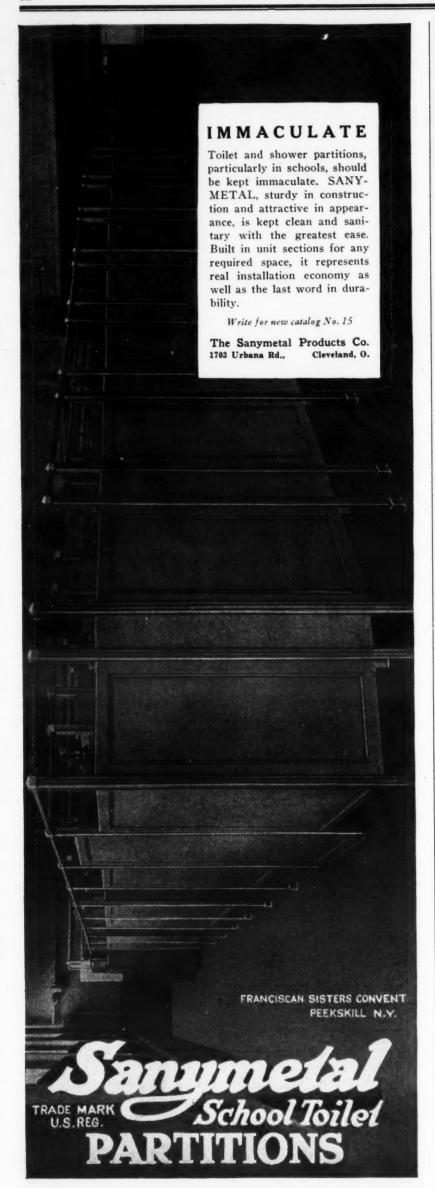
THE larger restaurants, hotels and businesses catering to the public well realize that their patrons must be served in comfort. Day-in-and-day-out dependability of Heggie-Simplex steel boilers insure June weather the year around, with an economy of operation that clinches the preference they enjoy as the most modern of heating boilers, in the most modern of buildings.

Heggie-Simplex Boiler Co., Joliet, Illinois. Representatives in principal cities — telephone and address listed under "Heggie-Simplex Boiler Company."

#### HEGGIE'SIMPLEX

ELECTRIC-WELDED STEEL HEATING BOILERS





# Over the Christmas Holidays RECONDITION your School with

#### SONNEBORN

#### **Products**

THE Christmas season affords an opportunity to lessen the wear and tear on your building by checking depreciation with the products described below. Their use will save time, trouble and money.

#### Protect Concrete Floors

Whether new or old, concrete floors need hardening to resist wear. Otherwise unhealthy concrete dust is scuffed up, and hollows or holes appear.

Lapidolith, the original concrete floor hardener, will make your concrete floors permanently wear-proof and dust-proof.

Lapidolith penetrates concrete, bringing the loose particles into a close-grained mass that is granite hard.

Easy to apply. Goes on floor like water. No experience needed to do the work, so labor cost is low.

#### Safeguard Wood Floors

One application of Lignophol not only hardens the surface to resist wear, but penetrates into the interior wood cells and fibres. The life-giving gums and oils in Lignophol restore the elasticity and endurance of the wood.

Do not waste money on messy oils or ordinary floor treatments. They evaporate or wear off. One Lignophol treatment keeps your wood floors young and strong for years.

#### Keep the Classrooms, Hallways, Auditorium Bright and Cheerful

Cemcoat is a paint specially designed for this purpose. It stays white after other paints turn yellow. Finger prints, ink or pencil stains can be washed off without injuring the paint. Can be washed over endlessly.

This remarkable paint will not chip or peel. It adheres to plaster, concrete or brick walls as easily as to wood. Usually, one less coat than customary is required because of its exceptionally heavy body.

#### **Keep Out Dampness**

Damp buildings are costly to heat. They are unhealthy for pupils. By treating your outside walls with Hydrocide Colorless, you can have a warm, moisture-proof building. Since it contains no paraffin, this product will not run in hot weather.

Write us that you would like further information and we will send you more complete data and demonstration samples.

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Wood floors—usually so hard to keep in presentable appearance—can be maintained easily and economically with Midland Liquid Waxoleum. The floor when finished with Liquid Waxoleum is not oily or sticky. Remarkable cleansing qualities are combined with an easy and quick polish.

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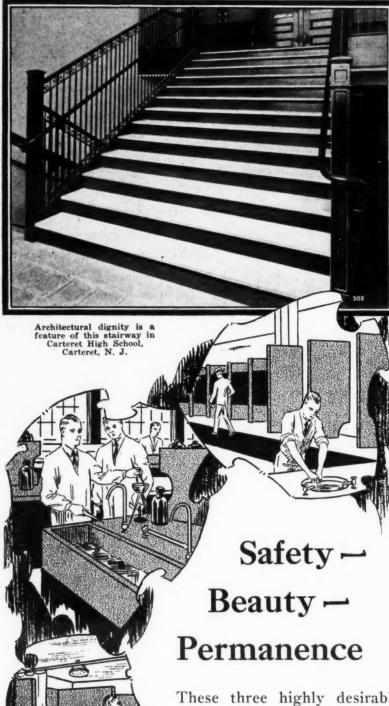
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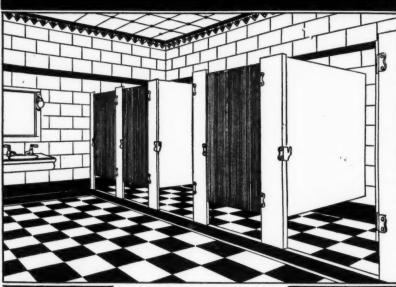
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O installation imposes greater demands for permanence, wearability and scientific sanitation than the school toilet and washroom. For this purpose, no other material can compare with Vitrolite. It is nonporous, damp-proof and acid-proof. Its firepolished surface defies dirt, grease, ink, pencil marks and scratches. A damp cloth will keep it clean. School authorities will find the solution of this important problem in the new

booklet which has just been issued by the Architects' Service Bureau of the Vitrolite Company. It gives detaileddrawingsforthenewest style of Vitrolite toilet compartments as well as for the use of Vitrolite for all sanitary and industrial purposes.

Write your name, or the name of your school, on the margin of this page, and we will send you this valuable booklet at once.



#### THE VITROLITE COMPANY

Suite 603, 133 W. Washington St., Chicago

Factory: Parkersburg, W. Va.

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THAN



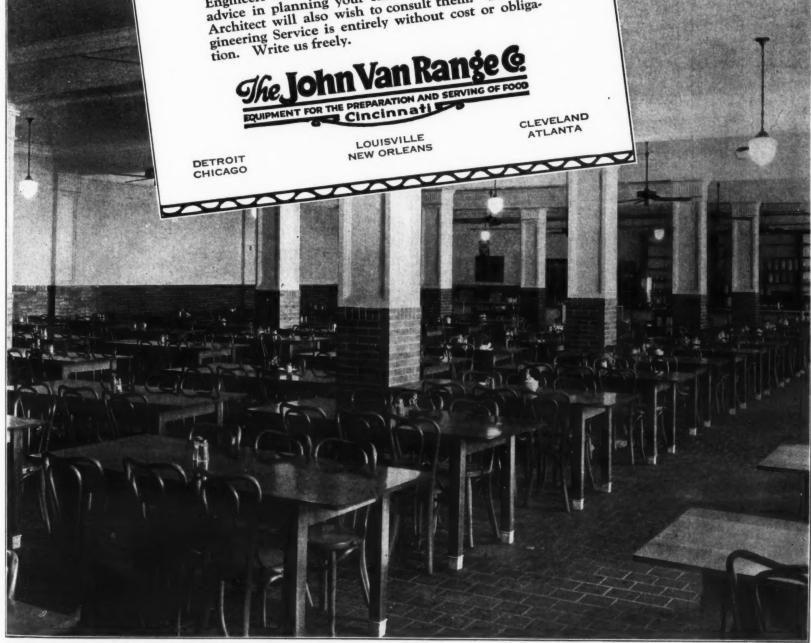
# The part played by "VAN" Cafeterias is of importance to every educator~

WELL-NOURISHED bodies are needed to house growing minds! For this reason Van Cafeterias have played an important part in modern education—a part that is acknowledged and commended by leading educators.

Van Cafeterias provide good food—serve it economically and efficiently—in the most attractive surroundings. In addition, Van Cafeterias, more than any other, are built to withstand the terrific use and abuse of school service.

A Van Cafeteria can be installed in an old school or a new one, in any size to meet any budget. Van Engineers will gladly lend you their experience and advice in planning your cafeteria. No doubt your advice in planning your cafeteria. This Enarchitect will also wish to consult them. This Engineering Service is entirely without cost or obligation. Write us freely.

The Van Cafeteria of the Bolton High School, Alexandria, La., is one of the country's finest. An exterior view of this splendid school is shown above.



AK

In college libraries

Oak floors grow



#### Integrity

Derby claims correct posture seating for his school chairs because leading Orthopedists agree that the Earl Thompson patented construction, used by Derby, is the construction which does secure correct posture to the sitter.

Derby claims adaptability to school needs for his school equipment because Derby models were patterned from the ideas of leading educators who understand school requirements.

Derby claims strength and durability for his school equipment because it is made as correctly as the considerable skill and experience of our chairmakers can make it. Price is determined from cost —not cost from a predetermined price.

Integrity begets public confidence. This confidence is manifest in the tremendous increase in the number and amounts of Derby school installations.

Derby statements can be relied upon.

#### P. DERBY & Co. INC. Chairmakers for 83 years

GARDNER, MASS.

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Boston, Mass. 197 Friend St.

OAK FLOORING

Valuable information

Chicago

NATURE'S GIFT OF

EVERLASTING BEAUTY

BUREAU 1267 Builders' Building

# Go to the Child



The Proof of



American Seating Superiority



Adjustable Universal No. 134



Steel Adjustable Box Desk and Chair No. 114 Where the needs of the child are given first consideration, there you will find "American" seating equipment.

Visit any "American' equipped classroom for proof of "American' superiority. There you will find the "seat-protected" child... the child who has been provided hygienic advantages. Erect, well developed, strong bodies greet you. Excellence of physical development is the rule... not the exception. Educational progress is assisted by correct seating.

Behind the universal approval accorded "American" seats by leading school hygiene authorities is a half century of specialization and research in school seating. More than built-in quality. than stamina and beauty, the "American" mark on school seats guarantees hygienic perfection. So, where the needs of the child are given first consideration, there you will find "American" seating equipment.



Adjustable Universal Tablet Arm Chair



Tubular Steel Model No. 101

American Seating Company

14 East Jackson Boulevard



hicago . Illinois



53 Distributors - The Factory is in Michigan, but the Service is Local to you



# Sana-Board Black Board Cleaner Prevents Eye Strain

A CHILD that must wear spectacles is to some extent a cripple. Preventing eye strain may save many a child in your schools from this handicap. Blackboards that are covered with layers of chalk are really gray and have very poor visibility when written upon. When they are really black and clean, glare is prevented and every student is given an even chance to read what is written on the board without stretching and straining. Sana-Board will keep blackboards that way.

Ask for Sample

Ecomonical

Sana-Board simplifies the task of cleaning boards. Merely dissolve a little in a pail of water, wipe the board and allow it to dry naturally. It leaves a clean easywriting surface.

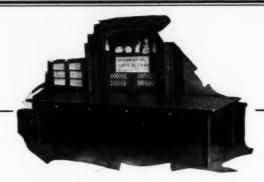


Simplicity

There is nothing difficult about the application or use of Sana-Board. Amy one can use it successfully. It offers a sure solution for your problem. It costs so very little. Investigate—you can't afford not to.

The HUNTINGTON
LABORATORIES, Inc
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## Group Instruction For First and Second Grades

The modern Elgin Method of "group instruction" is rapidly gaining vogue. It solves many problems for 1st and 2nd grades. It increases seating capacity and elasticity. It makes teaching more efficient. It creates a happier, more companionable atmosphere. It is more sanitary and hygienic.

> These betterments can be better appreciated after reading our booklet "Seating Efficiency." Send for it now, while you have time to consider it.

RINEHIMER BROS. MFG Co. ELGIN, ILL.

DEPT. OF SCHOOL FURNITURE

ELGIN

ESTABLISHED SINCE 1857

#### MANUAL TRAINING BENCH No. 280



A GLANCE AT THIS NEW PATTERN will show that the combination of various sized drawers and cupboard makes an unusually practical bench. Notice, especially, the small drawer which is intended to hold nails, screws, small tools, etc., which so easily become misplaced when kept with the larger tools. Being able to immediately lay hands on these small but necessary items, will be the means of saving a great deal of time, thereby promoting efficiency. Also, notice the large cupboard, which will hold such tools and materials which can not be kept in the general or three private drawers. Bench is equipped with our Abernathy Rapid Acting Roller Nut Vise No. 70D on front, adjustable stop and dog.

#### C. CHRISTIANSEN

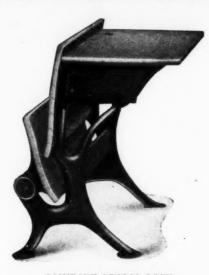
Manufacturer of this line since 1898

2814-2842 West 26th St.,

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MOVABLE CHAIR DESK. Three Adjustments. Rigid, Non-Vibrating Top.



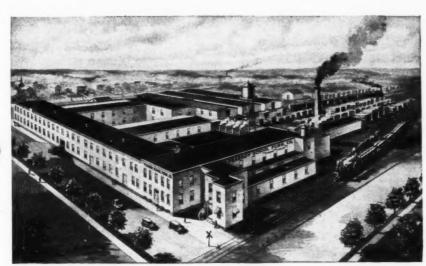
SANITARY SCHOOL DESK. Noiseless Folding Seat. Semi-Steel Standards.



SANITARY ADJUSTABLE DESK. Adjustable Seat and Top. Semi-Steel Standards.



OPERA CHAIR No. 600.



THE HOME OF PEABODY PRODUCTS



OPERA CHAIR No. 700.

School Office and Classroom Furniture

The home of Peabody Products is a modern plant, operated by an efficient industrial family. Twenty years' experience in the manufacture of high grade School Furniture. Every article sold with a guarantee to give complete satisfaction in every respect. "Peabody" service will please you.

#### The Peabody School Furniture Co.

North Manchester, Indiana

Write for Catalog and Price List





TEACHERS' DESKS-SEVEN PATTERNS. Built with Solid Oak Tops.

PEABODY PRODUCTS FOLDING CHAIR No. 51.
Form Fitting 5-Ply Veneers.

PATENTED JAN. 18, 1910.

SERVE YOU BEST

NON-TIP FOLDING CHAIR No. 70.
Folds as Flat as a Board.

PATENTED NOV. 12, 1918. **SERVE YOU BEST** 



#### Stacks Flat for Convenience of Storage

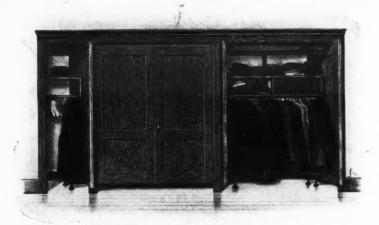


THE compactness with which the Standard Non-Tipping Chair folds represents economy, in that very little floor space is required for storage.

Many advanced features only to be found in the Standard Chair Line developed through our years of exclusive chair manufacturing will add many years of service to your seating problems.

Standard Folding Chairs are made in a variety of styles, write for descriptive catalogue and prices.

Standard Manufacturing Company, Cambridge City, 1020 S. Foote Street Indiana, U. S. A.







Today

### SAVE SPACE AND GREATLY INCREASE CONVENIENCE with EVANS Vanishing Door WARDROBES

The EVANS VANISHING DOOR, which makes these space-saving wardrobes possible, is so constructed that at a touch it swings back, on double pivoted arms that cannot bind or rattle, to a position at right angles to that when closed. As compared with the ordinary wardrobe—in, for example, a school—EVANS Wardrobes give the same accommodation in 12' x 2' as the old kind give in 8' by the full length of the classroom—besides eliminating the need for special heating and ventilation and the wall which separates cloakroom from classroom. Soundless, mischief-proof, and astonishingly economical of space, EVANS Vanishing Door WARDROBES are being accepted as standard school equipment everywhere. The complete facts—for your files—are interesting. May we send the illustrated catalogue containing them?

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EVANS VANISHING DOOR WARDROBES

MANUFACTURERS OF
HIGH GRADE
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PLAYGROUND APPARATUS
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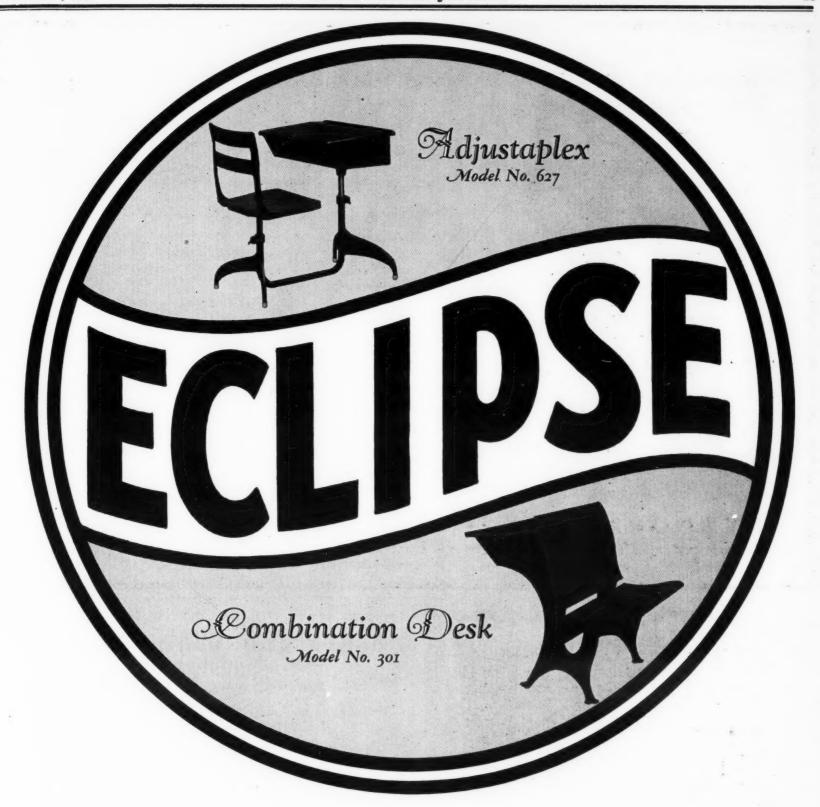


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GYMNASIUM EQUIPMENT
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1835 W. LAKE ST.

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#### "The Mark of Quality School Furniture"

A modern and complete line of school furniture is offered for your approval and selection. Built into each piece of "Eclipse" furniture are the modern improvements so essential in school equipment. The "Eclipse" line is most complete, a desk and chair for every need. Write for a complete catalogue and description of our entire line.

There are vast differences in school furniture—see "Eclipse," know "Eclipse," buy "Eclipse," and be assured of the best.

# The Theodor Kundtz Co. Cleveland Ohio



#### THE "ARLO" ADJUSTABLE PEDESTAL DESK

The "Arlo" Adjustable Pedestal Desk is our latest contribution to modern hygienic schoolroom seating. A beautiful desk, both in design and finish, it is absolutely sanitaryexceedingly well adapted to the varying needs of any classroom and guaranteed to withstand the strenuous requirements of every type of classroom service.

The pedestal is made of semi-steel, constructed to give greatest strength at the points of greatest strain. The broad, massive base is cup shaped and when screwed to the floor will never pull loose.

The "Arlo" Adjustable Pedestal Desk will last a lifetime; has steel sides and back and the top is made from maple or birch, finished in Arlo Brown (American Walnut).

Adjustments are simple and easily made. Book box chair seat are independently adjustable. This is a distinctive feature and makes it possible to adjust "Arlo" desks to meet the individual requirements of each pupil.

The "Arlo" Line includes The Arlo Adjustable Pedestal Desk with Study Top, The Arlo Non-Adjustable Pedestal Desk, and the Arlo Pedestal Tablet Arm Chair.

Descriptive literature and prices on request.

#### **Arlington Seating Company**

Flexibility of adjustments assures each pupil being properly fitted, insuring correct posture and real comfort.



#### READSBORO CHAIR COMPANY READSBORO, VERMONT "READSBORO" FURNITURE - QUALITY and SATISFACTION

PORTABLE ASSEMBLY SEATING

> SINGLE FOLDING CHAIRS

> > TABLET ARM CHAIRS

KINDERGARTEN **FURNITURE** 



No. 1019

SCHOOL DESKS and CHAIRS

SUNDAY SCHOOL **FURNITURE** 

FOLDING TABLES

JUVENILE FURNITURE

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# INDESTRUCTO SANI-STEEL DESKS AND CHAIRS ታኔል ታወጃርተናን ሴተናመንጀንፀር – በਜ਼ਾਮ - 2½ ታወጃርተናን ሴተናመንጀንፀር – በਜਾਮ - 2½ ታወጃርተናን ሴተናመንጀንፀር – በਜਾਮ - 2¼ ታወጃርተናን

#### COLUMBIA INDESTRUCTO CHAIR DESK

Back slats adjustable; Height and tilt of top adjustable; Top leveling Device.

Large—\$4.95; Medium—\$4.80; Small—\$4.65.

Dovetailed hardwood drawer A \$1.50; Book Drawer with steel sides and bottom B \$1.15; Swinging flush top ink well 15c.

The 24 good points of a school desk as established by a committee of leading educators are incorporated in this desk.—They are listed here.

#### INDESTRUCTO'S POINTS.

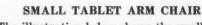
- Seat of proper height.
- All corners rounded. Seat saddled to fit body. Seat of proper width.
- Seat tilted higher at front.
- Back tipped backward slightly. Back curved to fit body.
- Back adjustable in height. Back of solid quartered oak.
- Seat extends slightly under top. Desk height adjustable to child.
- Desk slant adjustable. 11 and 12 constitute a Tilting Top.
- Curved front feet give same strength and effect as separate support.
  Desks easily moved for sweeping.
  Noiseless, no hinges or swivels.
  Arm rest extended backward.
  Simplicity—Examine illustration,
  Durability—Indestructible steel.
  Finish, dull, lasting quality.
  Flush top inkwell, noiseless, removable.

- Flush top inkweil, holselessable.
  Box or sliding drawer.
  May be used on either side.
  Nothing to catch dirt.
  Pencil groove on top.
  Top leveling device. 21.



#### SANI-STEEL INSTRUCTOR'S DESKS

Here is a modern desk for the modern school. This desk can be had with two drawers at \$13.00; with four drawers at \$17.00; with five drawers at \$19.50. It has a steel frame and body that is finished dark olive green. The top and drawers of fine-ply built up quartered oak, finished dark golden. Made in two sizes.



The illustration below shows the small tablet arm chair, especially adapted for use in elementary schools. The design and con-struction of this

chair is such that it will withstand severe usage and will meet every requirement for a tablet arm chair in the elementary schools. Price \$25.00 per dozen.



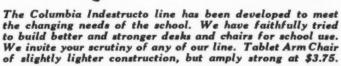
#### COLUMBIA INDESTRUCTO TABLET ARM CHAIR To the right is an illustra-

tion of the Columbia In-destructo Tablet Arm Chair. The frame is of steel, arc welded to prevent breakage, and is finished in olive green. slats are of quartered oak, while the seat and arm are of plain oak. Price of each \$4.25; with perforated shelf \$.25 extra.



#### LIGHT WEIGHT TABLET ARM CHAIR

The illustration to the left shows our tablet arm chair of slightly lighter construction, but amply strong. Price of each \$3.75.





#### COLUMBIA INDESTRUCTIBLE KINDERGARTEN CHAIR

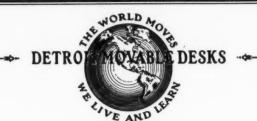
Here is our Indestructible Kindergarten chair. It is sturdily constructed with a saddled oak seat and curved quartered oak back and a solid steel frame. Made in three sizes. One doz-

en weigh 110 lbs. and are priced at \$18.75. Also the Elementary Tablet Arm Chair at

#### TEACHERS' CHAIR

This chair can be used for Teachers, Visitors, or the Li-brary. It is good looking and dignified. Oak seat and quartered oak back are finished dark golden or brown. Has an olive brown steel frame. iced at \$2.85 each.

> COLUMBIA SCHOOL SUPPLY CO. INDIANAPOLIS, IND.



The improved "DETROIT CHAIR DESK" is highly praised by Authorities on Modern School Equipment.

The entire "DETROIT" line consists of High School Single and Double Unit Tables, Tablet Arm Chairs, Kindergarten Tables and Chairs and is worthy of serious consideration.

Detailed information on the complete line will be furnished on request.

#### DETROIT SCHOOL EQUIPMENT CO.

General Offices and Factory, Holly, Mich.

#### Palmers

#### Vacuum Electric Blackboard Eraser Cleaner



A highly efficient, serviceable piece of equipment which should be in every modern school.

Cleans erasers thoroughly, quickly, and with little labor—at low cost of operation.

Has exclusive, individual features which make it superior:

Brush revolving at moderate speed, acts as a beater, dislodging crayon dust and cleans more thoroughly than stationary brush—yet, does not wear and tear eraser like rapidly rotating brush attached directly to motor shaft.

Indirect drive of brush prevents overloading motor.

Cleaning table level is adjustable to compensate for wear in brush—thus assuring utmost service from brush and making replacement infrequent.

Oil-less bearings are used, excepting in motor—and latter requires very little attention.

Bag of generous size and special vacuum cleaner material increases suction efficiency of cleaner.

OPERATES FROM ANY LIGHT SOCKET— DEPENDABLE — GUARANTEED OF GENUINE UTILITY — NOT A TOY

May be had with Chalk Tray Cleaning Attachment.

WRITE FOR DEMONSTRATION THROUGH NEARBY DEALER

Floor Brushes Liquid Soaps Boap Dispensers Paper Fixtures Erasers PALMER CO.

Manufacturers for the Jobber Milwaukee, USA Dusters
Disinfectants
Cleaners
Floor Dressings
Mops and Sticks

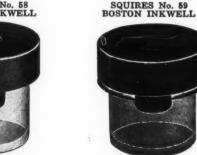
#### SQUIRES INKWELLS

We manufacture the Boston Inkwell in three different styles. All have hard rubber tops and the glasses fit either style of top. These fit 1 27/32 inch holes.

SQUIRES No. 58 BOSTON INKWELL



SQUIRES No. 60



SQUIRES No. 12 COMMON SENSE INKWELL



Our No. 12 or Common Sense Inkwell is made in three sizes, to fit holes  $1\frac{1}{2}$ ",  $1\frac{3}{4}$ " or  $1\frac{7}{6}$ ". Corks with Caps or Rubber Corks furnished when desired.

We make several other styles of inkwells.

Write for Catalogue, Prices and Samples.

SQUIRES INKWELL COMPANY
508-2ND AVE. PITTSBURGH, PA.



2200 square feet of Sterling Lifelong Blackboard . . a recent installation in the new Union District High School, Dunbar, West Virginia.

Typical of the better schools for which Sterling is specified. Walter F. Martens, Charleston,

West Virginia, Architect.

Every day-more and more Sterling Lifelong Blackboard is installed

# A permanent investment that has proved its worth to School Boards everywhere

Guaranteed for the life of the building!

That is the unqualified promise of this 45 year old institution . . . that is the measure of its faith in Sterling Lifelong Blackboard. And Sterling is guaranteed by the distributor who sells it, as well.

Sensational, possibly, to the few. But to those who know the Weber Costello institution and the policies which have dominated it, the amazing achievement of Sterling comes as a logical step in school supply progress.

Today . . . hundreds of thousands of feet of Sterling are serving school needs everywhere. As better schools are being erected . . . as school boards seek to meet their budgets with permanent blackboard investment . . . Sterling is going forward with steady strides.

Black . . . and black all through. A finer writing surface, and a body that seasons and improves

with age. Warp and buckle proof . . . strictly fireproof. Little depreciation . . . with its first cost practically its final cost and easy to install.

Leading architects and contractors specify Sterling. School Boards now know that the reasonable investment Sterling calls for is to all ends a *final* investment. So the *cost* of Sterling really grows less as time goes on. If you don't know all about Sterling Lifelong Blackboard you should get the facts *now*.

Send for Free Sample Find out for yourself just why Sterling is being installed in the new and better schools everywhere. Send the coupon for a free sample of Sterling Lifelong Blackboard . . . and detailed information of this time-tested and proved successful product.

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Gentlemen: Please send me Free of all charge a sample of Sterling Lifelong Blackboard together with detailed information about this time - tested and proved successful product. It is understood that this obligates me in no way.

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#### Standards of Excellence in Blackboard Service

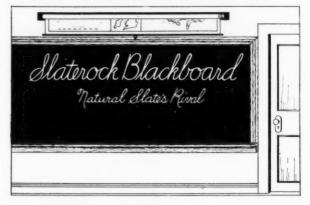


A Superior Blackboard

SLATEBESTOS has established a new standard of excellence for blackboard use. It is hard as rock and a slate black color all the way through. The surface is non-reflecting, dense, uniform velvetsmooth, and takes chalk so that it produces a clear white mark, easily discernible from any part of the room. Slatebestos is superior to natural slate in that it is more fire-resisting, costs less, is less subject to breakage, and it actually improves with age.



SLATEROCK is just what its name implies: a rock core with a slate surface. It is a permanent blackboard, the life of which is measured only by the life of the school building itself. Extreme care and exacting supervision in the process of manufacture have made a superior rock into a blackboard that is supreme in every way.



Statoplate

Dependable - Serviceable

SLATOPLATE has proved its worth throughout the many years of satisfactory service it has rendered its many users. Built of the finest wood-pulp, it is specially treated to make it stiffer, harder, stronger, and more dependable than other boards.

Details, free samples, and catalog on request.

#### Beckley-Cardy 17 East 23rd Chicago, Ill. Company Street

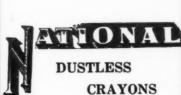


VUL-COT is solid at sides and bottomso that even the smallest particles cannot sift through onto the floor. Vul-Cot cannot dent or bend; cannot split or break; will not scratch fine furniture. Three out of five who buy equipment for schools and offices specify Vul-Cot. Guaranteed for five years—many have been in service for thirty. At stationery and school supply houses!

 $m_{II}$ 

-the standard waste basket

National Vulcanized Fibre Co., Wilmington, Del., U.S.A. Offices in principal cities



are truly **Crayons of Character** 



Free of grit from tip to tip NATIONAL CRAY-ONS respond perfectly to every stroke.

Being uniform in strength, every piece of NATIONAL CRAYON will withstand a firm grip of the fingers without danger of breaking or crumbling.

The dustless feature, combined with uniformity in all other respects, makes NATIONAL the ideal crayon for the classroom.

> Your regular school supply dealer can serve you. If not, write direct.



THE NATIONAL CRAYON CO.

West Chester





# More Comfortable—More Convenient With the "Moeser Arm" Top

The efficiency of the teacher's work depends upon the degree of intelligent reciprocation on the part of the pupils —

And that reciprocation is determined, to a remarkable degree, upon their comfort.

This Company is pioneering a movement toward more correct and comfortable seating. We ask that you permit us to place the information before you.

# Correct Posture Also More Comfortable And More Convenient

The tendency of the average school desk is to force the pupil to twist in the seat—to face the light.

These disadvantages tend toward the development of Spinal Curvature, Defective Eyesight, and Nervous Disorders.

#### Moeser Extended Arm Top

By the use of the Moeser Extended Arm on National Desks we obviate all necessity for the pupil twisting in the seat and facing the light in order to secure support for the arm when writing.

Support for the arm is afforded when pupil is facing the front, with full support for the back when writing. Better penmanship is a result, with less fatigue and nervous strain.

This feature tends to foster correct posture, is more comfortable and convenient, and greatly increases the usable writing and working surface.

#### Supt. W. J. Hamilton, of the Public Schools of Oak Park, Ill., wrote:

"The Moeser arm rest on the desks is the best thing that we have found to insure correct posture, and the pupils assure us that the seats are more comfortable and more convenient for desk work through the addition of this arm rest. Our Board is placing a large order for further installation of this type of desk."

The Moeser Supporting Arm Top can be furnished with any National School Desk.

We would like to supply you with complete information on this distinct advance in school seating. Write us for circulars, etc.

THE NATIONAL SCHOOL EQUIPMENT CO.

Manufacturers of Complete School Equipment
PORT WASHINGTON, WISCONSIN

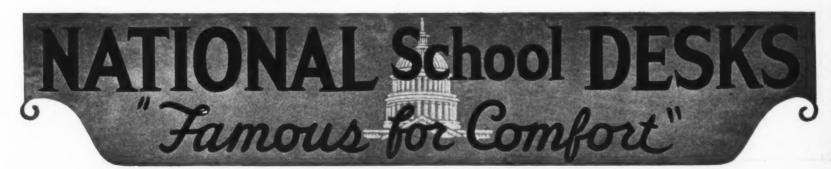


#### A Wonderful Finish That Does Not "Scratch"

We have developed a remarkable finish, by which the tannic acid in the wood is brought to the surface, bringing with it the natural color of the wood. The finish is developed within the fibre, consequently it cannot wear off nor rub off.

It has a richer, deeper color and a velvety "feel." It is both "hard" and "elastic"; also transparent. It is very pleasing and will harmonize with any interior finish. Woods treated by this process wear longer and retain their original finished appearance longer.

Ask us about it.



## INVINCIBLE -

TRUE TO NAME

Don't Buy Until You Have Obtained Quotations on the INVINCIBLE— The School Desk Supreme

> GUARANTEED FOR TWENTY-FIVE YEARS

The Rowles Line embodies every practical type of desk. If the Invincible is not the type of desk desired send for our complete furniture catalog. We will gladly mail it on request.

E. W. A. ROWLES CO.

2345 So. LaSalle St., Chicago, Ill.



Luther Burbank School, Stockton, California Opening 20'-9" x 9'-8"

#### **EFFICIENCY**

The use of Acme Rolling Wood Partitions makes for efficiency in the modern school plant. The Acme Partition illustrated above provides a moving wall for practically the entire side of the room.

The blackboard surface shown is applied directly to the smooth surface of the finished wood.

The entire partition coils overhead out of the way, throwing two class rooms into one large room for assembly purposes.

Easy operation by chain hoist or hand crank is accomplished by means of exclusive Acme ball bearing shaft construction.

Send for complete details.

#### ACME PARTITION COMPANY, INC.

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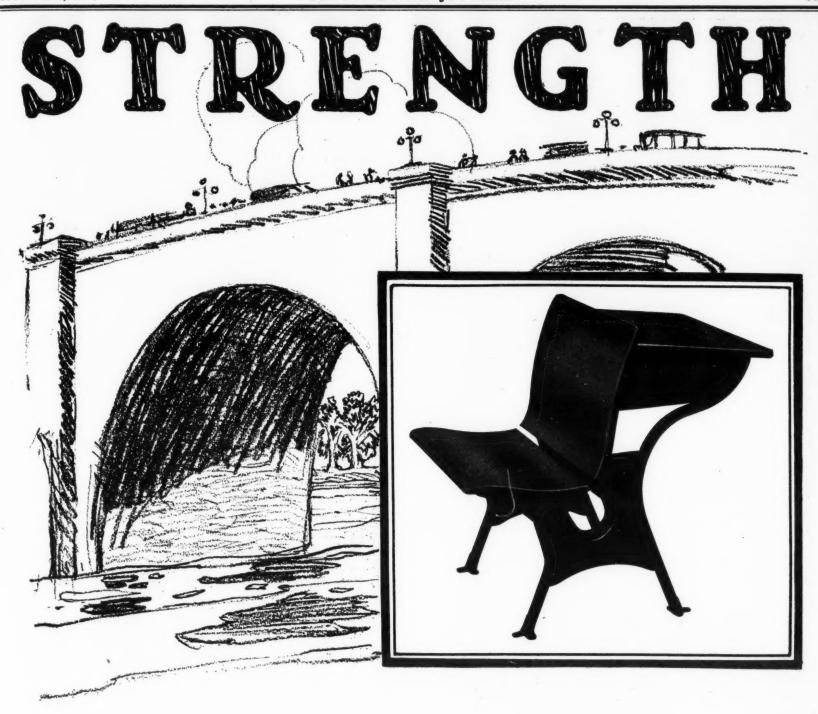
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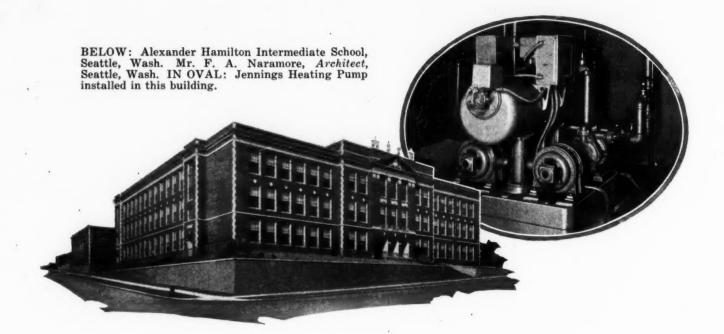
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The Editor.



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Still Trying to Force the Camel Through "The Eye of the Needle."

## If I Had My First Year as Board Member to do Over

Stephen Storgaard

My service on the school board has had its share of the bitter mixed with the sweet. In fact, I have often felt that there has been a generous overdose of the bitter. Being a board member has cost me more than a few hours of time, considerable worry, some money, and a few friends (of the fair-weather kind), but at that it has been worth the price. While a grateful citizenry has never forced any lovingcups into my arms, I was reelected the last time by a two-to-one vote in spite of the fact that my opponent made a strenuous house-to-house canvass, while I never lifted a finger in behalf

of my own candidacy.

In the years that I have been on the board, I have seen our graduating classes grow from a scant score to such numbers that there is scarcely standing room for them all on the spacious stage of our new senior-high-school auditorium; our original faculty of high-school graduates has now become one of trained educational specialists; our physical plant has been transformed from the gargoyled, cupolaed monstrosities of the post-Civil-War era to the trim, well-equipped, thoroughly ventilated, hygienically lighted edifices that are the pride of our city today. Not much of the credit for all this is mine, but the idea of having had even a small share in it affords me a mighty lot of satisfaction. That satisfaction is somewhat dampened, however, by the feeling that if I were beginning my school-board service over again in the light of my present knowledge and experience, I could do a great deal better than I have done, and could make my share in the educational progress of the community a much more important one than it has been.

I Would Not Give Advice If I had my first year as school-board member to do over, for instance, I should not assume that election to the school board would ex officio qualify me to act as a supervisor of instruction or school inspector. I remember when I first got on the school board going up to the schoolhouse, sitting around and listening to recitations, and solemnly giving the teachers pedagogical advice (at least I thought it was that) after class. The teachers listened to me in all seriousness, but whether it was because they were polite girls, were afraid of me because of my official position, or because they had their sense of humor under unusual control, I cannot in the light of after years quite decide. I am sure now that it was not because of any consciousness of the value of the advice. A teacher who would set her course according to the necessarily varying directions offered by six or more lay school-board members would have a sad time reaching any perceptible goal. For one thing, I have seen few board members who knew enough about teaching to make their advice worth while. Even if they did know what they were talking about, their ideas would probably be at such variance that they would confuse the teacher more than they would help her. I should leave the supervision of the teaching force to the superintendent and to the principals and supervisors responsible to the superintendent.

Not that I shouldn't visit school occasionally; but if I should see anything I did not approve, I most certainly should discuss it with our superintendent instead of taking it up with the

teacher myself. Neither should I issue any commands or orders to any janitor or other employee of the board. I have seen men and women elected to our board who, when they first began to serve, thought that their certificates of election

made them not school legislators but school executives. They assumed that as board members they could take it upon themselves to tell the janitors how often to scrub the corridors and when to wash the windows. I am glad to be able to state that at the present time, while every member of the board has one vote in deciding school policies, we have an understanding that no individual board member has any more business meddling in the actual management of the school than has any other citizen.

I Would Be Tolerant If I were to do it over again, I should be a little more tolerant with colleagues who might differ with me. I should not take it for granted that a fellow board member were a knave or a fool simply because his slant at a given situation were different from my own. As I look back over the years and remember how John Henry and I almost came to blows over the selection of face-brick for the old high-school building, I am not quite sure whether I ought

to snicker at the two of us or blush.

Not that I do not think that a board member should stand up for his convictions with all the strength of which he is capable. But after he has done his darndest and is licked, he had better yield gracefully, smile, and forget about it. I see no reason why it should be necessary for anybody to lose his temper over the expediency of one course of action as compared with another. Of course, if a moral question is involved, a matter of right and wrong, or the inflicting of rank injustice on some teacher, pupil, or other board employee, that is another matter. Even school-board harmony is not precious enough to be worth the sacrifice of one's convictions in such a case.

I should try to keep my mouth shut a little tighter than I used to. Not that a school board should shroud its proceedings with secrecy. If the school board is going to build for the future with any hope of permanency, the public must be taken into the board's confidence. The people must know what the financial situation is, how much money is being spent, and what it is being spent for. Regarding most other matters, too, there should be a policy of wide-open publicity. Occasionally, however, every school board encounters a problem whose solution is going to be hindered and not facilitated by public discussion. A teacher, for instance, who in another environment might do efficient work, is a misfit in our community. Is a retailing of the board's discussion of her case in the homes of her pupils going to advance the welfare of the school system? Is it what we should like to have happen if the teacher in question were a daughter of our own? If telling what happened at board meeting needlessly exposes individuals to the fangs of the town gossips, it is better not to tell.

I Would Join No Clique

I should try to go to every board meeting with an open mind, not ready to favor every measure sponsored by a friend nor prepared to knife everything sponsored by a man whose views generally were different from my own. If approached on any proposition before the meeting, I should be careful not to commit myself one way or the other until I had had an opportunity to hear the whole thing thrashed out over the table in the board meeting. Some years ago there was a group of men on our board who were called the First National Bank crowd, because they generally got their cue from Hon. J. Jasper Jones, president of the First National Bank. They were all pretty good chaps, but I have always felt that things went better after their

places were taken by people who did a little thinking for themselves. For the sake of my own self-respect, I should not care to be classed as belonging to the First National Bank crowd, the Farmers' and Merchants' Bank crowd, or any other organized group whose purpose was the furthering of the special interests of an organization or an individual.

I should try not to be a "buck-passer." If the board should be forced to take action that my friends did not like, I should make a desperate effort not to side-step my share of the responsibility. Some men with whom I have been associated on the board have always been ready to claim the credit for popular acts of the board, but have always blamed on their colleagues things which did not meet the favor of the public. They generally got by with it for a while, but in the end they fooled only themselves. Chickens come home to roost, so it is best to claim them in the beginning.

I Would Vote Right

After all, however, the real criterion of a school-board member is the way he votes at board meeting. All the personal virtues in the world will not make a man a good board member if he votes against the things that make for the advancement of the school system. Likewise, we can forgive a good many faults in a man whose vote can be counted upon to be a prudent, public-spirited, progressive one. How should I vote if I were beginning my school-board service over again? What policies should I favor, which ones should I oppose as questions involving them would come before the board for decision?

I believe that my vote would be for the best interests of the schools if it should be in favor

of the following things:

1. Holding our superintendent to full responsibility for the administration of the schools and giving him commensurate authority. A board, a committee, or a group, whether it be composed of two members or twenty, can debate, argue, and legislate, but it cannot do things. There can be but one executive head to the school system, and he must be the superintendent.

2. Preparation of a carefully planned budget. The use of a budget enables the board to plan its policies definitely in advance. It gives the board an opportunity to pass on the comparative worth of the various activities of its schools. It does away with waste, and helps insure efficiency in administration.

3. A liberal salary schedule, with correspondingly high qualifications required of our teachers and other employees. Some of the most expensive teachers we have had have been among those drawing the lowest salaries.

Things I Would Oppose

Among the things I should oppose would be: 1. Action by the board in any individual case of school discipline. Let the board make general rules when necessary, but leave the application of those rules to the superintendent.

2. Authorization of anything new, the value of which has not already been proved. I do not want our school funds to be used for the promotion of anybody's fads, nor our pupils to play the part of guinea pigs in testing somebody's theories. There is a place for experiment in education, but I believe that that place is in the experimental schools and laboratories of our universities and colleges of education. I am not a reactionary, and I do not want our schools to remain static, but when we do make a change in things, I want to be sure that we are making an improvement and not merely a change.

3. Making any major expenditure without expert advice. Before embarking on a building program, the board needs to make sure that it is locating the schools where the children ((Concluded on Page 136)

## The Function and Organization of Educational-Research Bureaus

The Development of the Research Field

It is doubtless unnecessary for a student of modern educational administration any longer to argue the necessity for educational research. This paper will not attempt, therefore, any ambitious defense of the case. It would seem to be sufficiently obvious that the history of city school administration, through the last two decades at least, has been a history of the increasing dependence upon objectively defensible data as a foundation for administrative policies

and procedure.

The American public schools have developed into a fairly well-defined social institution, with the boundaries of its activities in the main resting upon an acceptance of its specific task by other social institutions and agencies. If we may assume this to be true, then from the very nature of our organization the society which supports the schools has an unquestioned right to expect that reasonable effort shall be directed toward an efficient, economical, and intelligent administration of the functions of the school. Economy of social effort directed to the education of the youth of our land is a compelling argument for research. Financially, the schools \ fields, the cities of 100,000 and over would then, are becoming a larger and heavier burden on the taxable resources of the nation. Again, research will tend to replace guesswork with sound business economy, in the financing of our program. For too long a time, the function of the school has been predicated, and its actions and policies based upon opinion, belief, and conviction. To quote Dr. George D. Strayer of Teachers' College, Columbia University: "The characteristic of the work of the administrator even as little as fifty years ago was the degree in which his decisions were determined by tradition or by theoretical considerations which have proved fallacious." "There has been," says Dr. Henry L. Smith, dean of the School of Education, Indiana University, "too much willingness in the past to determine the educational, needs and methods purely on the basis of opinion rather than upon the basis of investigation."2

Just when research in education began, would be impossible to state, for we know of no way of ascertaining when first a school administrator substituted facts for opinion. But the influence of research in business, engineering, medicine, and in the fields of biology, psychology, mathematics, and social science began to have its effect during the early years of the Twentieth Century. The work of Dr. J. M. Rice, and his Society of Educational Research, and his previous work through the agency of The Forum,

was pioneer in nature.

Again, it is not the purpose of this paper to go into the development of the various fields of educational research. The development of university, state, and independent or privately endowed research bureaus has been excellently covered by Dr. Harold B. Chapman, in his dissertation on "Organized Research in Education With Special Reference to the Bureau of Educational Research," Ohio State University, 1926.

It will become evident to any student of the educational-research problem, that the very recency of development of the field would make it impossible for organization and function to have progressed much beyond the embryonic stage.

'George D. Strayer, "The Scientific Approach to the Problems of Educational Administration." an address delivered on the occasion of the Fiftieth Anniversary Celebration of the Johns Hopkins University. before the conference of the Department of Education, and the College for Teachers.

2Henry L. Smith, "Need for Research in Education," National Education Association, Proceedings, 1926, pp. 316-322.

Marion E. Townsend, Trenton, N. J.

While we do not wish to lay ourselves open to the very charge which the research idea so vigorously combats, that of basing our judgment upon opinion, it will, we feel, become reasonably evident, as this paper progresses that we have "honored research quite as much in the breach as in the observance," if the paraphrase may be allowed.

The Scope and Method of This Investigation

In the selection of a narrow field, that of research bureaus in cities of the United States of 100,000 population and over, we hoped to find the Research activity as well, and as typically organized as would be the case anywhere in the whole span of city school organization. Moreover, the commanding place these cities occupy by virtue of size, and probably more adequate financial provision for any given activity, would tend to make a study, and a recommended organization for them of greater use, than a study of the whole field, wherein we might become confused by the variation of function, organization, control, and field of endeavor. If we are to take Dr. Chapman's figure of 105 as the total number of all research bureaus, in all as a class represent in excess of fifty per cent of all city bureaus.

On account of the comparative freshness of the field, and the lack of a common method of report as to personnel, function and activity, the questionary was determined upon as the medium for obtaining the desired information regarding the actual conditions in the field of public-school research bureaus chosen. This technic is undoubtedly open to criticism, particularly since the form and set-up of a questionary tends to condition the nature of the replies received. Important elements were undoubtedly omitted, and the questions sent out under the various headings may in some cases be criticized from the viewpoint of their obvious lack of pertinency to the field. It may be said in justification for the questionary, that the content was to some degree determined by the report of research departments by Elsie H. Martin, in 1924,3 in which the main lines of activity which existed at the time of that report, were specified.

Replies to the questionary were received from sixty-nine cities. In eight cities not reporting, a research bureau is known to be functioning, but no definite information as to the details of

organization or function is known.

It should be stated in justice to those cities reported as having no bureau of research, that it would be a gross injustice to assume that no research activities are carried on in these localities. Organization plans, local conditions affecting the same, and lack of sufficient funds for such departmentalization are frequently indicated in correspondence with the superintendents, as contributing factors for the lack of a bureau or division devoted exclusively to re-

The Data Tabulated

The data in the appended tables give a complete clue to the character and inclusiveness of the questions asked in the investigation. Table I consists of a general display of the replies to the questionary arranged alphabetically, showing the organization and personnel of bureaus of educational research in cities reporting. Table II contains data on the cities, relative to function and activities of the bureaus.

In both Table I and Table II, will be found. at the end of the tabulation, the description of "typical" bureaus; first, that bureau typical of the whole number reporting; second, the "typi-

<sup>3</sup>Elsio H. Martin: "Organization of Research Bu-eaus in City School Systems." United States Bureau f Education. City School Leaflet No. 14, January, 1924.

cal" bureau of cities of 100,000 to 500,000 population; third, the "typical" bureau of cities of 500,000 to 1,000,000 population; and fourth, the "typical" bureau of cities of a population exceeding 1,000,000. In this discussion the word "typical" is used as Dr. Chapman used it in his report, mentioned above, that is, the bureau having the personnel, or the function possessed by a numerical majority of the cities, in each case.

**Typical Bureaus** 

Thus we find a typical bureau in all cities of the United States of 100,000 population and over, constituted and functioning as follows:

This bureau has one executive officer, other than the superintendent of schools, but under his general direction. This executive is called a director of research, and does not have the status of assistant superintendent of schools. He receives an annual salary of \$4,150. The typical bureau has one assistant director, and three clerical workers. The functions of this bureau are shown to be rather varied, in view of the comparatively small organization back of its activities. It plans testing programs for the school system, or carries out those programs planned by other agencies. Its service seems by the answers given to be largely advisory, though just what interpretation we are to make of this statement in the face of other specific answers, is hard to say. This bureau carries out its work through principals or other line officers. Reports are made occasionally of the progress of the work to other divisions of the system. The bureau undertakes the instruction of teachers in various aspects of its activities, and prepares survey tests, remedial tests, and other remedial material for purposes of improving instruction. The placement and disposition of atypical pupils, presumably in most cases of seriously mentally retarded pupils, becomes the peculiar function of the research bureau of this typical city.

In the typical bureau in cities of from 100,000 to 500,000, we find one director, and assistant, a psychologist, and a clerical force of one. Its functions are the same as those performed by

the first-mentioned typical bureau. The personnel and functions of the typical bureau in cities with population between 500,000 and 1,000,000 differs very slightly from the one just described. Here again, we find the chief executive officer of such a bureau to be designated as a director of research, who in this case. receives an annual salary of \$5,000. The other members of this typical organization are one assistant director, three psychologists, three testing assistants, and three clerks. The functions are identical to the first typical bureau, with the addition of that of conducting guidance surveys, and with the further exception of the function of issuing diagnostic and remedial tests, although these cities apparently interpret remedial material as equivalent thereto.

**Bureaus in Large Cities** 

In cities of over 1,000,000 population, we find a somewhat different situation. The work of the bureau of educational research is, in these cities, more purely administrative, and is subdivided in some instances into the activities of different bureaus. For example, Chicago writes as follows regarding its organization:

"We have a bureau of instructional research, with one director and four clerks; a bureau of building survey, one director, three clerks; a bureau of special schools, one director, two clerks; a bureau of child study, one director. nine assistants, four clerks; a bureau of vocational guidance, one director, twenty-two advisors, seventeen clerks, two doctors; a bureau

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of expenditures and economics, one director, four clerks; a bureau of compulsory attendance, one director, one assistant director, 101 truant officers, four probation officers, twelve clerks. The answers to your questions pertain only to the bureau of instructional research."

In Detroit, there are two research departments, one of instructional research and one of administrative research. Tabulation of functions were made for the department of instructional research only.

New York City has a unified bureau, called the bureau of reference, research, and statistics.

Philadelphia has an unusually descriptive title for its research executive—that of director of educational research and results.

The typical organization and functions of the bureaus in this group of cities is not very enlightening, since the organization is so varied. However, for sake of completeness of analysis, we find this typical bureau to have a director, variously named, with a salary of \$5,200 annually. He has one assistant director and ten clerks. The departmental functions are almost impossible to classify in any typical manner, but so far as analysis is possible in the check list in Tables I and II, we see them not greatly different from the functions in the other classes of cities, but more confined.

It should be noted in conclusion of this section of the discussion, that another city, St. Louis, has found it advisable to modify their procedure by divorcing from their department of tests and measurements, certain research functions previously performed by that department, and to organize new departments, those of (1) school attendance, (2) hygiene, (3) vocational counseling, (4) tests and measurements. (5) curriculum, bocks and supplies, (6) housing and fixed equipment, (7) personnel, (8) records and statistics, and (9) school and community relations.

#### Interpretation of Data

In attempting the most difficult parts of our task, that of interpreting the fact disclosed by our technic, and then of making some recommendations which seem pertinent, we may again, quite possibly, lay ourselves open to the charge of arriving at conclusions on the basis of opinion.

Nothing, however, is more truly borne in upon a student of human affairs, than the patent observation that some position must be reached, some orientating point, whereon we may survey what actually obtains in a field, and from that survey prognosticate the most probable or desirable future trends. Our further progress seems to depend upon the answer to three specific questions, which we now propose, and for which we contemplate a partial answer.

1. What, if any, functional definition can we find for educational research?

2. What present trends must be encouraged or discouraged in the organization of research bureaus, in order to realize the proper functions of this definition?

3. What organization will most probably guarantee a further wholesome development of the research function?

#### Arriving at a Definition of the Research Function

In discussing first, a functional definition, we present the general purposes as outlined by Dr. F. W. Ballou, superintendent of schools, Washington, D. C., in an address before the National Education Association in 1925. Dr. Ballou was then speaking of the proposed activities of the newly organized research program in the Washington schools. These general purposes, according to Dr. Ballou are:

"1. To become a source of information for teachers and officers, in standard tests and scales.

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"2. To direct and supervise the giving of all standardized tests in the Washington schools.

"3. To study and compare achievements of pupils in Washington schools with pupils of other cities.

"4. To formulate and supervise plans for greater efficiency in educational reorganization and procedure, and

"5. To cooperate with outside educators desiring to make research studies in Washington which have been approved by the superintendent."

To comment briefly on Dr. Ballou's statement, we would call attention to several rather definitely implied organization elements therein contained:

a) First, the research function is seen to be one of an informative nature. (b) It is to direct, where its special scientific and technical field makes it the most logical directive force. (c) It is to study and compare the results of its findings within the natural field of its activities. (d) It is to plan and recommend the future programs of the schools, when these programs may be measured by the instruments of science under its control. (e) It is, furthermore, to encourage an interchange of research activities between its own and other like agencies, in order that there may be a universality of application of the scientific method. (f) In conclusion, it is to do all this, within the control, and with due recognition of the responsible office of the one who must after all initiate and recommend any departure from present policy, that is, the superintendent of schools. Perhaps it is needless to so paraphrase these purposes as outlined by Superintendent Ballou, but in their statement and restatement, lies much of the hope for the future effectiveness of bureaus of research in our larger cities.

For the purposes of our study, it has not, previous to this point, been deemed necessary to so far narrow the field of our inquiry, as to attempt a dogmatic definition of the field of research. However, to better answer the first of our three questions, we venture a definition which seems to cover the essential elements. agreed upon by most students of research. Research in education, as applied to the organizations we are now studying, is that branch of city educational endeavor which, by means of reflective thinking upon its problems, proposes to study, test, compare, and, where possible, to demonstrate the efficiency of the policies and practice of education. Such reflective thinking may, and indeed must be aided by all the known scientific means at our disposal for the collection and interpretation of facts. The mere collection of facts is not research. The scientific attitude must insist upon interpretation of these facts. The two phases are inseparable, and one without the other is of small use, if research is to become a valid and reliable instrument.

#### The Field of Research in These Cities

The field of research in the thought of the present writer, must, in conformity to the definition just given, permeate the whole range of educative activity. It is futile, for example, for us to study and inquire as to the relative effectiveness of the various methods of making a curriculum unless we likewise study the relative effectiveness of types of buildings, or the possible tax burden which a proposed curriculum will require. A true research problem must often deal with a minor and even infinitesimal detail of the whole educational range. But just as truly as a drought in the corn belt is reflected in the sensitive "ticker" at a Wall-Street office, so we must be prepared not only to analyze, but to synthesize and integrate our whole educational problem. Only by the meticulous fitting together of the jig-saw puzzle of the learning and teaching arts, may we hope

to escape being "blown about by every wind of doctrine" even in these days of sophistication and glorification of the scientific method. Such is the field of the bureau of educational research. To quote from Dr. Joseph H. Willits, chairman of the Section of Social and Economic Sciences, of the American Association for the Advancement of Science, "The important thing is that our economic and social facts and problems are today far beyond the range of casual study. The point that I would emphasize is that if we are to live successfully in this new environment, if stability not only of individuals but also of all industry, is to be maintained, we must not base our judgment of economics, business, and social problems on casual opinion but on a systematic collection and study of the facts."4

If then, the research field should cover reflective thinking upon the facts of the whole educational program, let us list briefly the major lines of endeavor upon which we may posit the activity of a bureau of educational research in cities of over 100,000 population.

- First, we have child accounting. The bureau should be in possession of the trained personnel, who can investigate from the standpoint of intelligence, health, environment, racial or hereditary limitation, the educability of each child placed in the public school. It is not proposed here, that the entire burden shall be assumed by the research department, but the directive program should be here. It should be possible, through a program set up by the research department, to follow the child in his progress through the school, with an intelligible record of his needs.

Second, the research department should be in charge of all experiments which will have for their object, the investigation of, or the drastic modification of curricula or courses of study. Let it be noted here that we do not advocate that the research bureau either propose or direct such changes, nor that the curriculum revision shall be in its charge. The function as here advanced, is that of investigation.

Third, it should be the function of the research department to investigate and report upon the facts relative to proposed or actual financial burdens in the educational program of the city.

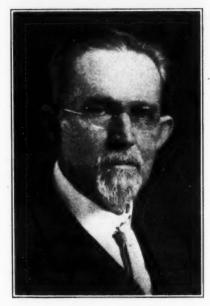
Fourth, in any questions involving the future building program of the system which have to do with population trends, desirability of sites, or any other such problems not involving purely technical architectural knowledge, the research bureau should ascertain and interpret the facts.

Fifth, in any study of the proper use or suggested change in the texts, supplies, or equipment of an educational sort, experimentation by any department of the system should be under the advice of the research bureau.

Sixth, the research bureau should contribute in such a way as to make easily and conveniently available for use, bulletins, reports, lectures and conferences to any administrative, supervisory, or teaching group or individual, for the purpose of information, guidance or discussion.

Seventh, the research bureau should under the direction of the superintendent of schools, enter into any worthy research endeavor, in cooperation with other similar agencies as shall have for their purpose the establishment of new, or the improvement of present practices in the field.

Eighth, the research bureau should at all times refer to the proper division of the school system, the responsibility of supervision and in many cases, of initiation of any research program, it being the function of the research



DR. MELL L. DUGGAN, State Superintendent of Public Instruction, Atlanta, Ga.

Atlanta, Ga.

Dr. Duggan, who has been appointed by the governor of Georgia as state superintendent, succeeds the late Mr. Fort E. Land. The appointment took effect immediately and Mr. Duggan will serve through June, 1929.

Dr. Duggan is well known in the state, having been connected with the state educational department for the last sixteen years. During Mr. Land's illness and absence from the office, Dr. Duggan caried on the work connected with the office of state superintendent.

Dr. Duggan first became connected with the state education department when he was named state supervisor by Dr. M. L. Brittain, then state superintendent. Previous to that time he had been county superintendent of Hancock county for eighteen years. Dr. Duggan into the was named state supervisor by Dr. M. L. Brittain, then state superintendent. Previous to that time he had been county superintendent of Hancock county for eighteen years.

Dr. Duggan is a graduate of Mercer University and holds a degree given by that institution. He completed his postgraduate work at Harvard University.

bureau to devise, map out and encourage inrestigation, rather than to supervise instruction.

Details of activities will be treated in the answer to our third major question, that of a proposed organization of the bureau. Since we are, in this paper, treating only of the function and organization of the research activities in cities of 100,000 and over, the general statement of the field contained in the eight points outlined above may probably be concentrated in the superintendent's office in smaller school systems. They are unquestionably present as necessary elements in all organizations, educational in nature.

#### Criticism of Present Trends in Light of the **Definition of Function**

What present trends must be encouraged or discouraged, in the organization of research bureaus, in order to realize the proper functions of this definition?

Research bureaus characteristically have been organized in response to a need arising out of the recent introduction of standardized testing of intelligence and achievement, as one of the generally accepted educational technics. This being the case, too great emphasis has been placed on the mere testing function of the bureau. In fact, a study of our collected data shows that a majority of the bureaus are little more than testing bureaus. Important as this work is, the tendency to center the entire responsibility for all testing within the bureau has the effect of lessening its opportunity in other desirable research fields.

Another unfortunate tendency, found in some bureaus, is that of placing the supervisory responsibility within the bureau. Supervision of instruction is a large field in itself, and the attempt to make a director of research at once the fact-finding agent, and the administrator of instruction will inevitably result in narrowing his research activity to the rationalization of an instructional program, or vice versa, will cause the instructional program to become simply a proving ground for experimentation. Either of these extremes may probably be avoided, with proper personnel, and a constant guard against the temptation for exploitation. But if research is to be free to experiment and criticize it must avoid entangling alliances with supervision. Happily this tendency is not great, as may be seen by reference to Table II.

A third rather obvious tendency which may be explained by the very recency of the research movement, is the matter of inadequate staffing. In whatever population class the study is made, the typical bureau is asked to undertake tasks all out of proportion to the ability of the small technical and clerical staff to promote with any degree of satisfaction. During the course of our investigation, the writer was able to discuss personally, with nine directors of research, the work of their bureaus. In every instance, it was

(Continued on Page 136)

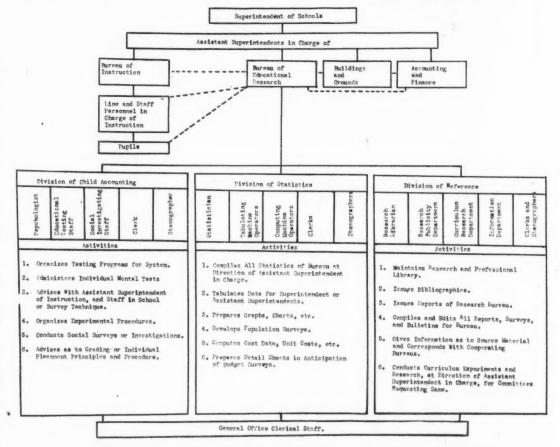


CHART I. PROPOSED ORGANIZATION FOR BUREAUS OF RESEARCH IN CITIES OF 100,000 POPULATION AND OVER.

<sup>&</sup>lt;sup>4</sup>Dr. Joseph H. Willits, "The Importance of Research in Economics and Social Problems," Science Monthly, 24:126, p. 129, February 9, 1927.

## Development and Present Status of the Elementary-School Principalship

Clarence R. Stone, Berkeley, Calif.

Stages of Development. Our earliest elementary schools were one-teacher schools. As the schools grew in size, one of the teachers was designated as head-teacher, chief-teacher, or principal-teacher. This head-teacher, or principal, as he came to be called in most systems, was given certain specific duties to perform, aside from his regular classroom duties, and consequently, granted a higher salary than the other teachers. Crouch<sup>1</sup> has given us an excellent, brief history of the elementary-school principalship in the United States. To show the character of the duties of the principal in this early stage of development, he quotes the following from the fifth annual school report of the St. Louis schools, dated 1859: Section 26. The principal teachers shall keep a

Section 26. The principal teachers shall keep a register in which they shall record the name, age, birthplace, residence, and date of admission of each pupil for the first time entered in the public schools and also the name and occupation of the parent or

Section 27. They shall also make a daily record of the pupils admitted, present, absent, or tardy, and at the close of each quarter and the close of the year furnish the superintendent with an abstract of the same according to prescribed forms.

stract of the same according to prescribed forms.

Section 28. The principal shall have a general supervision of the grounds, buildings, and appurtenances of the school, and shall be held responsible for any want of neatness or cleanliness on the premises; whenever any repairs are needed he shall give notice thereof to the superintendent.

Section 29. The principal of each school shall furnish the director of the ward in which such school is situated, the names of those pupils whose parents or guardians declare themselves unable to provide said pupils with the necessary school books, and upon satsfactory evidence of such inability, the aforesaid directors shall order such books to be furnished at the expense of the board. It shall be the duty of such principal to account to the board at the end of each quarter for all books and stationery furnished for the use of indigent children

Section 30. Each principal shall examine the classes of assistants as often as practicable, without neglecting the pupils under his immediate charge.

Head-Teacher Stage. The chief duty of the official head of the school during this first stage of development was that of teaching. Certain duties of a routine nature, chiefly clerical, managerial, and disciplinary, differentiated the principal from the other teachers. The idea of distinctly educational supervision is not in evidence in the regulations, although the duty of examining the classes of the other teachers is mentioned. This early stage may be designated as the head-teacher stage.

An Early Improvement

Stage of Part-Time Teaching. Naturally, the next step in the development of the principalship was partial relief from classroom work. Such a recommendation was made by W. H. Wells for the Chicago schools as early as 1859. Crouch says, "It would appear that in many of the larger centers of population congested classrooms were compelling school officials to seek new methods of administration. Problems of attendance, promotion, discipline, and methods of instruction were demanding solutions. That this movement was widespread at this stage in the history of the public-school system can be shown from many sources." This second stage may be called the stage of part-time teaching. The chief duty of the head of the school is still that of teaching; but the problems arising as a result of the increase in the size of the school demanded an increasing amount of the principal's time. The following recommendation of S. W. Seton of New York in 1863 indicates that although classroom visitation has become one of the principal's duties, the chief function of such visitation was that of helping the inexpe-



rienced teacher in matters of discipline and management:

I have been reminded again of the propriety and necessity of the principal being given large opportunities for frequent visits to all the classrooms, to correct all errors of discipline and management, by counsel and practical instruction to the inexperienced. Some of the principals, by being obliged to teach a class themselves, are precluded from such useful efforts; . . . . a proper attention to the school records will sometimes interfere with this more useful supervision by the principal if no aid is afforded him in keeping the books.

is afforded him in keeping the books.

Managerial Stage. The third stage of development is that in which the principal is freed entirely from regular classroom teaching, but in which the managerial and administrative duties far overshadow his duties with reference to educational administration and supervision of instruction. The following school-board regulation in force in St. Louis in 1871 shows the enlarged authority and responsibility of the principal during this stage:

The principals shall be permitted without interference on the part of any member of the board, or the superintendent, to arrange the details for the internal government of their schools according to their own method, provided such method is not inconsistent with the general regulation of the schools; such principals, of course, being liable to be judged as to their qualifications by the results they may produce.

The Best Development

Stages of Professional Leadership. The fourth stage of development of the elementary principalship is that of professional leadership. The comprehensiveness of the authority and responsibility of the principal in this stage of development is shown in the school-board regulation in force in Chicago in 1924:

Principals of schools are the responsible administrative heads of their respective schools and for the organization, supervision, and administration thereof.

leadership presupposes a school of sufficient size to make it economical to have a principal capable of being a real educational leader in the school and in the community, a school large enough to enable the principal to effect an organization adequate for caring for individual differences in interests, ability, and rate of learning. Such a conception of the principalship, properly understood by the community leaders and school officials, tends to produce a school organization of relatively large elementary schools.

In this stage of development, a supervising principal is often placed in charge of any primary school within the district from which his middle and upper-grade pupils come. The writer's first experiences as a supervising principal was in an eight-room school, including the kindergarten and the first four grades. It was located within a few blocks of a large elementary school to which the outgoing class was promoted. Usually, after a year or two the principal of the small primary school was promoted to a larger school. The principal of the nearby large school had no office help of any kind. Would it not have been a more economical and efficient arrangement to have assigned the supervision of the primary school to the principal of the large school and have provided him with a secretary to take care of clerical and other routine matters for both schools? Such a plan would have meant proper coordination of the instruction of the pupils who first attended the primary school and later attended the larger school.

The Present Situation

The present status of the principalship deserves discussion from the standpoint of freedom from regular teaching duties, adequate salary schedules, and relief from clerical and routine duties.

Status as to Regular Teaching Duty. According to data published by the National Education Association,<sup>2</sup> the great majority of the elementary principals in cities of over 100,000 population do not have teaching duties. Reports from 59 such cities show that of 4,053 elementary principals 554, or 12 per cent, have teaching duties. Evidently the idea of organization of elementary schools into large supervisory units under the direction of supervisory principals is not in as universal operation in large cities as it probably should be. Table 1, compiled from

In this stage the principal is an educational leader and expert, familiar with the latest developments in elementary education and supervisory technic. Published statements of leading superintendents, principals, and experts in school administration show that it is quite generally recognized that his most important function is that of improvement of instruction. In order that he may devote the proper attention and time to the major problems of educational administration, organization, and supervision and be a professional leader in the community as well as in the school, office help is provided to take care of clerical and other routine matters. The nature and amount of such assistance, of course, depends upon the size of the school. But the most economical and efficient type of school organization from the standpoint of classification and supervision is one that provides for relatively large elementary schools. The principalship in this stage of professional

data in this research bulletin, reveals interesting and significant facts in this connection for four classes of cities as to size.

It is evident from this table that the smaller the city the less likely it is that the elementary principal has no regular teaching duties. The fact that one third of the elementary-school principals in the cities of 30,000 to 100,000 population have teaching duties raises the question as to whether the superintendents of many of these systems are doing what they might in organizing their elementary schools into relatively large supervisory units in accordance with the best theory and practice in city-school administration, and whether they are doing what they might in placing the elementary principalship upon the proper basis of professional leadership. The smaller the city the more difficult it is to secure large elementary schools, and the easier it is to carry out the

<sup>&</sup>lt;sup>2</sup>Research Bulletin No. 2, Vol. V (1927).

<sup>&</sup>lt;sup>1</sup>Crouch, Roy A., The Status of the Elementary-School Principal, in the Fifth Yearbook of the Department of Elementary-School Principals, National Educational Association (1926).

TABLE 2. Median Salary of Elementary Principals in Comparison with Certain Other Officials
Median Salary

Population	Cities	Elementary Principal With Teaching Duty	Principal Without Teaching Duty	Superintendent
Over 100.000	59	\$2 449	\$3.437	\$10.087
30,000-100 000		1.977	2.636	6,428
10,000- 30,000		1.855	2.250	4,765
5.000- 10.000		1,517	2,229	4,026

TABLE 3. Status of the Principalship with Reference to Adequate Clerical Help

Population	Cities	Full-Time Clerks	Supervising Principals	High-School Principals	High School Principals	
Over 100 000	59	2.998	3,499	220	359	
30.000-100.000		843	1,251	260	192	
10.000- 30.000	298	396	624	182	284	
5,000- 10,000 \	374	131	222	111	309	

supervision from the central office. But even in cities under 30,000 population we should undoubtedly find a higher status of the elementary principalship if the schools were properly organized. Evidently, outside the larger cities, the American public has not been led to see the advantage of organizing the schools in such a manner as to provide for large supervisory units under the direction of a supervising principal who is a real professional leader.

Satisfactory Salaries in Cities Status as to Salary. According to the salary tables in the research bulletin just referred to, approximately 250 of 3,499 elementary school principals without teaching duties, in 59 cities of over 100,000 population, receive salaries of \$5,000 or above. The salary schedule for the public schools in St. Louis, officially approved in 1924, enables all elementary school principals of buildings of 18 or more rooms to attain an annual salary of \$5,000 for 10 months' service. Approximately one third of the principals of the larger elementary schools in cities over 100,000 receive a salary of \$4,000 to \$6,000 for 10 months' service. Many young men and women in the profession of education might well prepare themselves specifically for the elementary principalship and look forward to advancement from one principalship to another, having larger opportunities and responsibilities. Such positions in the large cities compare favorably with college professorships and small superintendencies in reference to salary and recognition, and the permanency of the position in the larger cities and the opportunities for congenial professional associations are factors not to be overlooked.

Table 2, compiled from the tables in the previously mentioned research bulletin, reveals some interesting facts concerning the status of the principalship as to salary. Upon comparing the salaries of the supervising elementary principal and the superintendent, one questions immediately whether or not the salary of the principal in cities of over 30,000 should be only one third to one half that of the superintendent. Furthermore, are not the responsibilities and requirements of the large elementary school and the relatively higher cost of living in the large city such as to justify as high a median salary as that of superintendents of cities of 5,000 to 10,000? Evidently the public realizes to a greater extent the need for fairly adequate salaries for the superintendents than for elementary principals. While the higher ranges of salaries of elementary principals in certain large cities are very encouraging, the average salary of supervising principals for the country at large is very probably not sufficient to command the caliber of professional leadership needed in that position.

Status as to Relief from Clerical and Routine Duties. Table 3, which has been compiled from the same source as Tables 1 and 2, gives a fair indication as to the status of the principalship with reference to adequate clerical help. In the data from which this table has been compiled, no distinction was made between clerks in elementary schools, junior high schools, and senior high schools. It is fair to assume that the junior and senior high schools had at least one clerk each. It appears that approximately two thirds of the supervising principals in cities over 100,000 are provided with fulltime clerks. In cities of 30,000 to 100,000 only about one third of the supervising principals are supplied with full-time clerks, and the same seems to be true in cities of 10,000 to 30,000. Apparently supervisory principals in cities of 5,000 to 10,000 very rarely have full-time clerks. Some of the large cities provide the largest elementary schools with a vice-principal or teacher without regular teaching duty, to assist the principal and to take charge of a room during a teacher's conference with the principal.

The Situation in a Nutshell Summary. There are four stages of development in the elementary principalship; namely, the head-teacher stage, the stage of part-time teaching, the managerial stage, and the stage of professional leadership. The facts show that the great majority of elementary principalships in cities of less than 30,000 are still in the first and second stages of development. Evidently the supervision in the great majority of these centers is carried out through the central office. The school is not made the supervisory unit.

In cities of 30,000 to 100,000 approximately one third of the principalships are still in the first and second stages. Of the other two thirds it is not possible to determine what percentage is in stage three and what percentage has advanced into the stage of real professional leader-The fact that only about one third of these supervisory principals have full-time clerks and the fact that their average salary is only \$2,636, probably indicates that the great majority of these principals, who are free from teaching duty, are primarily clerical and managerial officials rather than professional leaders devoting over a third of their time to improvement of teaching.

The status of the elementary principalship in cities of over 100,000 is promising. A considerable number of such cities pay maximum salaries to elementary principals ranging from \$4,000 to \$6,000 for 10 months, a salary that compares favorably with that of college professors and superintendents of towns below 20,000 population. The great majority of such principals are provided with a full-time clerk. Many of these principals are real professional leaders and experts, scientifically administering and supervising their schools, devoting at least 40 per cent of their time to the improvement of the teachers, and making distinct contributions to the system and to education.

Authorities in school administration, supervision, and methods are fairly well agreed that the school should be the unit of supervision and that the development of the elementary principalship to the stage of professional leadership and expertness in supervision is an essential part of the advancement of education.

## Some Queer Misconceptions Regarding Intelligence Tests

Arthur S. Otis, Ph.D., Yonkers, N. Y.

The writer has been somewhat amused by the attempt on the part of a superintendent, in two articles entitled, "A Plea for a Science of Education,"1 to prove that intelligence tests are of no value. To quote his exact words: "As I said in the beginning, intelligence is not being measured by any means, nor have we ever made

Of course no such statement as the one quoted will seriously disturb those who are really busy testing and who know what value may be obtained by testing and what its limitations are. To the practical schoolman, it makes no difference whether so-called intelligence tests measure intelligence or not. What he wants to know is this: Will the so-called intelligence tests help me to discover during the first week of school who is likely to do excellent work, who is likely to do medium work, and who is likely to do poor work, so that a pupil in any one of these three general classes may be placed with others like him, so that the bright ones will not be held back by those who are not so bright, and so that the dull ones will not be discouraged because of the need of the class as a whole to go faster than they can go?

In other words, it is fast becoming common experience of school administrators and teachers that pupils taught in homogeneous groups can make better progress and make it with greater ease, both for the pupil and for the teacher, than can pupils taught in heterogeneous classes of the kind that most schools had before the advent of intelligence tests.

And, as suggested above, what the presentknow is: Do intelligence tests aid in sorting

<sup>1</sup>School Board Journal, November, 1926, p. 70; December, 1926, p. 66.

day superintendent and school principal want to

pupils into more homogeneous groups in learning ability?

The answer is, "Most emphatically yes." And who will deny it in the face of the facts? There are now several hundred cities and towns that are so classifying their pupils, and the number is growing by leaps and bounds.

The superintendent quotes some scores in his first article which were obtained in Chicago and which he feels help prove that intelligence cannot be measured. Now, it happens that Chicago is one of the cities which are leading in the classification of pupils into homogeneous groups. Thousands of pupils are tested and classified each year. Someone is measuring something with considerable satisfaction.

#### The Experience of Enid

No doubt one of the pioneers in pupil classification on the basis of "intelligence tests" was Superintendent E. D. Price, of Enid, Oklahoma. who began in the spring of 1921 to classify pupils in grades 1-8 into three groups (bright, normal, and dull) on the basis of IQ, found by the Binet-Simon Test. The bright pupils were found to be able to do the work of grades 1-8 in six years, and were so scheduled. The normal pupils took the normal time, and the dull pupils were given nine years. The high-school pupils were similarly classified and the different groups given different curriculums.

Of course there was nothing rigid or final about the classification. At any time that a pupil was found to be wrongly classified, he was immediately placed where he belonged.

In a bulletin published by the Enid board of education, Superintendent Price gives the results of a questionary sent to 61 teachers in this school system after one semester with the

(Concluded on Page 134)

## The Problem of the Selection of Textbooks

Frank A. Jensen, Superintendent of Schools, Rockford, Ill.

It is becoming increasingly clear in the minds of those who face the practical problems of improving instruction, that the textbook usually determines the success or failure of any educational method.

No scheme, device, or plan of teaching anything has ever spread its efficiency very far until it was put into a textbook and made available for everyone who chose to use it.

It is universally recognized that America produces the best textbooks in the world. Our teachers are more dependent on 'textbooks than are the teachers of European nations. The success or failure of our educational theories and methods in this country is largely determined by the type of textbooks used in the schools.

Dr. Franklin W. Johnson, in an article in Teachers' College Record in 1925, says: "More than any other single factor, the textbook determines what is to be taught in the high-school classroom. In only a slightly less degree it determines the methods of instruction. In other words, textbooks largely determine the curriculum. The selection of textbooks, then, is a matter of prime importance in the administration and supervision of the high school."

It is interesting here to note that the cost of textbooks has been about constant in these times of higher prices. According to Howard in 1924, "The per cent of current expenses spent for textbooks has remained practically constant for the six years 1916-1922. The average per cent of current expenses spent for textbooks in eleven states in 1920 was 2.28 per cent. This study indicates that the cost of textbooks has increased on the same basis as other items listed under current expenses of a school system."

This is all the more significant when one considers that we use more books in each grade each year. That the original first reader reread many times has given way to at least six first-grade readers and more.

The Selection of Textbooks

On the basis of the cost, the question of textbook selection might be considered as an insignificant problem. In terms of the textbooks' control and pace-setting in our educational system it is—next to the selection of teachers the most important problem in the administration and supervision of our schools.

In the pioneer schools the pupils reported to school with the books in the possession of the family and the teacher heard the lessons from these books. With the monitorial system of hearing lessons in mass, and with the increased numbers attending school, uniformity of textbooks in the local school was the natural outcome; afterward, for a very different reason, uniformity spread to larger units, and in a few instances we have state uniformity of textbooks.

With the uniformity of textbooks came the problem of their selection for the unit represented. It may be a city, county, or state selection of textbooks. This was done in the pioneer schools by the patrons of the school in their annual democratic school meeting. This method of selection soon gave way to the assigning of this task to a committee of the patrons elected at the school meeting. When the school board came into being as the authoritative agency for running the schools, the problem of selection of textbooks was exercised by the school board. The school board early in its development instituted the committee scheme and one of these many committees examined and recommended to the school board the textbooks to be used in

This committee of the school board early in its development allowed the superintendent to advise with them but he had no vote. Finally,

we have the committees of the school board going out of existence and the recommending authority to the school board in the matter of textbooks and teacher selection passing from the special committee to the superintendent of schools. The problem of selection of textbooks passed from the layman of a school board, to the board of education's hired expert in educational supervision and administration.

What was once a petty political situation has given way to a highly technical and scientific procedure. The problem of the publisher's representative has changed from that of getting a majority vote of a school board to that of presenting his commodity to a committee of trained experts who makes a selection.

Dr. A. E. Winship in his article, "From Absurd to Beautiful Books," in 1909 said, "There has been no greater advance in the United States in one hundred, in fifty, or in twenty years than in the schools.

"There has been no greater improvement in the schools than in the textbook. Educational progress, in inception as well as in evolution, has been almost exclusively through educators, and almost never from the outside."

#### Selling Methods of the Publisher

During this transition the selling tactics of the publishers has changed from one selling a highly specialized finished product to an uninformed layman, to a publisher's representative presenting the qualities of his highly specialized finished product to an informed and discriminating committee. Many misunderstandings have accumulated by a few publisher's representatives using the former vote-getting methods on educational experts and committees equipped to make intelligent decisions.

The problem of the selection of textbooks begins with the publisher's evaluation of manuscripts; part manuscripts and ideas of prospective authors. Investigations have indicated that about eight per cent of the manuscripts presented to publishers are accepted and put into textbook form.

The first elimination by the publishers, in most cases, has the sanction of practical school people in the field. Many publishers submit manuscripts under consideration, to three or four experts in the field for their independent reactions.

Also this elimination is checked by a careful study of education trends as revealed by the addresses at educational meetings, from year-books, outstanding courses of study, and research. It seems to be a cardinal principle of the publishers to attempt to keep their hands on the educational pulse. Many manuscripts are placed by their authors in classroom situa-



tions for an impartial test before being presented to the publishers. Some publishers print an edition of a manuscript for test use. One publisher reports, "If the book is in any sense an innovation, or if there is any doubt in the editorial department as to the general acceptance of certain features of the book, it is customary to have it tried out in actual classroom work."

The tendency of two decades ago of buying manuscripts from authors has given way to the plan of publishers contracting with authors with ideas to write manuscripts for a prospective textbook market. The old scheme of professional textbook writers has given way to authors who are direct representatives and experts in the field in which they are writing. Partnerships of the college specialist with the practicalist in the field are common these days. This partnership effected by the publishers is a factor in the ultimate selection of textbooks, and mirrors the demand by the schools that the theory must have an immediate application. The critical eyewitness recorder of school activities is beginning to replace the armchair writers of scholastic textbooks. After the textbook has been published, the publisher puts his commodity on the market through samples, the briefs of the textbooks, the usual advertising, and by the publisher's representatives who speak for the textbooks.

The briefs and the advertising are an attempt on the part of the publisher to aid the purchasers in their selection of the textbooks for their schools. Salesmanship principles are not lacking in the approach through the brief, submitting of samples and their advertising. To supplement all these a publisher's representative appears in person to speak for the textbooks of the publisher he represents. With shift of textbook selection from lay school-board members to experts in school administration, supervision, and teaching, the publisher's representative force has changed from a manipulator of petty politics to that of the highly trained and well-equipped salesman of a highly specialized commodity, the textbook. A check on the qualifications of the publisher's representatives indicates that about 85 per cent are college graduates and about 90 per cent have had successful experience in the schools, as teacher, supervisor, or administrator. The standards set up by publishers as the minimum qualifications for their representative force compares well with the standards set up by boards of education for their supervisors and teachers. The publisher trains and coaches these representatives so they have become a body of well-informed salesmen capable of analyzing their textbooks in a way that it should be of service to the selecting committee.

These are some of the agencies that contribute in the service of helping the purchaser select a textbook for his school and such is the general scheme of reducing the countless textbook manuscripts to about eight per cent. This reduction is made by the scrutiny of the publisher with the assistance of educators in the field. The American publishers are the clearing house for the best ideas in education with a high degree of field approval of textbooks before publication.

Cubberley in his pamphlet, "A Distinctive American Achievement," says: "In no country are there more teachers engaged in the work of textbook making, nowhere is it harder to create a new and successful textbook, and nowhere are textbooks in preparation subjected to such a severe trying-out process before publication. In no country, moreover, are the text-

books in use revised more frequently to keep them abreast with educational thought."

Because the publisher knows that his books must run the gauntlet of the keenest critics in the world, at the hands of his rivals, he has sought the best manuscripts. Therefore, a small percentage of manuscripts presented are accepted.

The tendency at present in the matter of selecting a textbook from the eight per cent of all the possibilities, as presented by the American publishers, is somewhat as follows:

#### The Final Authority in Textbook Selection

It seems quite universal that the final authority in textbook selection rests with the board of education. In nearly one hundred per cent of the cases the superintendent of schools is the initiatory and recommending power so far as the board of education is concerned. So practically, the decision of the selection of textbooks rests with the superintendent.

The rules and regulations of the boards of education do not indicate how the superintendent shall arrive at his conclusions in matters of textbook selection; but they do specify very definitely that the superintendent shall recommend textbooks to be used in the schools in the same spirit that he recommends teachers for employment to the board of education. The spirit of this administrative phase of a superintendent's work is that he may and should seek assistance in arriving at his decision, but after the decision is reached it is the sole responsibility of the superintendent of schools to his board of education.

Naturally nearly every superintendent goes to his assistants for advice in the matter of textbook selection. This assistance is most often secured through a committee appointed by the superintendent for the definite purpose of examining the field of textbooks and making recommendations. These committees range from three to fifteen members and are composed of administrators, supervisors, and teachers. In the junior and senior high schools, under the leadership of the principal, the textbook committee is formed from the department heads and e classroom teachers. Few schools reported the method of the American primaries where all the teachers vote on the textbooks.

Recommendations for textbook requirements in the elementary schools generally come to the superintendent from the supervisory staff, while in the junior and senior high schools it comes from the principals.

These reports in 80 per cent of the situations are recommendations to superintendents and not a final report. However, based on the fact that the responsibility of this work is assigned by the superintendent to those he has confidence in, 95 per cent of the recommendations are final.

#### Initiating Changes in Textbooks

Changes of textbooks are reported to initiate with teacher, supervisor, principal, and superintendent. That initiation is generally a reaction to a course at summer school, extension course, professional reading and in no small way to the influence of the publisher's representative, who presents his textbooks to the responsible people in a school system. Perhaps, there is an analogy between the creating of a need for a new textbook, in the same way that the splendid show window may create a need for a new hat. Why not raise the question, "Are textbooks sold to us or do we select textbooks?" The publishers no doubt feel that through their representatives they initiate a large number of demands for a new tool. What superintendent of schools here has ever been guilty of sending a live, wide-awake publisher's representative to interview a head of department; who has not taken an extension course, attended a summer school, or read a professional magazine or book for some time, with the avowed purpose that



MR. W. D. VINCENT. State Superintendent of Public Instruction, Boise, Idaho.

Boise, Idaho.

Mr. Vincent, who was recently appointed state superintendent of public instruction of Idaho, is a graduate of the University of Kansas, and completed his postgraduate work at Columbia University and Chicago University.

Mr. Vincent has had seventeen years' experience in the school field in Idaho, having had experience in rural, village, and city schools. He was formerly head of the state industrial training school at St. Anthony, Idaho, and was a member of the faculty of the educational department of the state university.

he may initiate a change in the tools of the department over which she or he presides?

Textbook selection and curriculum building go hand in hand in most school organizations. The curriculum committee establishes the objectives, and then tools in the form of textbooks must be selected to meet these objectives. One publisher says, "Let the school people build the courses of study that best serve the schools, and let the publishers see that textbooks are published to meet them."

There seems to be a wide variation in the method of informing publishers of the possible market for a new book. Many just pass the word to the publisher's representative as he happens to call, to the effect that in many cases

the committee has worked three months when a new book is presented. The scheme used by Supt. Condon of Cincinnati, Ohio, seems to be the fairest for all concerned and brings to the attention of the committees at once all the available material from which to make the selection. Supt. Condon writes to all the publishers at the same time informing them about what they are considering and their method of procedure.

Practice seems to indicate, that exposing the selecting committee to the publisher's representative stands about 50-50, while the answer to the question as to whether the publisher's representative is an asset or a liability to the selecting committee, it stood about 70 per cent asset and 30 per cent liability. This seems to indicate a growing confidence in the school people that the representative can conserve the time of the committee by pointing out the outstanding features of their textbooks, many of which might never be discovered by members of the committee.

#### Selection by Committees

The secret committee on textbook selection has a questionable history both from the standpoint of the publisher and from the standpoint of the superintendent. The one party concerned questions, if there ever was a secret committee and what is being camouflaged, while the other says, it is protection from unscrupulous publisher's representatives in competition. The one takes the point of view that they employ and train competent representatives to render a service, and the other that the committee can make a saner selection if not exposed to the spokesman of the textbooks under consideration.

The tendency is to have open committees for textbook selection with all interested publishers given the same treatment with reference to seeing committees both individually and together. A little administrative authority properly executed by the superintendent of schools will obviate the occasional abuse of too much time being used by the representatives. Representatives as a rule will comply when they feel they are all getting the same deal.

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AFTER THE ST. LOUIS TORNADO

The Columbia School at Garrison and St. Louis Avenues, was one of four public school buildings damaged by the tornado which struck the city about one o'clock, September 29, 1927. All of the children in this building were brought out of the structure in safety, but in several of the other schools the loss of life amounted to six children.

The efficiency of the building department of the St. Louis schools showed up to splendid advantage following the disaster. All of the children were immediately housed in school buildings adjoining the injured area and the work of repairing the damaged buildings was begun almost immediately.

## What About the Left-Overs?

Emily Guiwits, Lincoln, Nebr.

The schools have opened, and hundreds of teachers and would-be teachers are left without jobs. The list includes both men and women, young, not so young, and old; well qualified and with inadequate training; experienced and inexperienced. Seldom if ever has there been a year when so many fine teachers were without employment, some holding a master's degree, and many offering subjects that usually are hard to find for the schools needing them.

This year is exceptional in many respects; nothing in the last ten years has approximated present conditions. Not fifty per cent of the usual number of vacancies have occurred; teachers were afraid to give up their positions, even though unsatisfactory, when ordinarily they would have resigned at the close of school with no doubt of their ability to find other openings. On the other hand, there have been at least twice the usual number of applicants. This fact is not hard to explain: the initial reason lies in crop failure one year after another, slowing up business and the professions, and changing the plans of many now asking for teaching positions who do not want to teach but who do want to attach themselves to a pay roll for the coming months.

Who Are the Leftovers?

Perhaps a third of this season's applicants were educational "floaters," persons who have been teachers and hoped they had left the work permanently, now forced into it for at least one year more. They will accept a lower salary than regular teachers ask, and naturally a school loard will pay as low salary as possible to insure good service. "See what we can get for our money! She got fifteen hundred two years ago. but she'll come here for twelve-fifty!" No one can blame a board for taking up such an offer; no one can wholly blame the teacher for taking the job if she really needs it; somewhere there is injustice to applicants who expect to stay in the teaching profession, but it is not easy to say just where the injustice lies.

Many teachers who expected to do graduate work or to start in professional courses are financially unable to carry out their plans. More often than one would think possible, we find partnerships, two young men in a business or profession which will not carry them both this year: one has been a teacher or is qualified to teach; he goes out and finds a job for one year only, as he hopes, and takes it for two thirds the salary he would demand if he expected to stay. Young married women are asking for positions and often getting them at low salary, this in spite of the fast-spreading sentiment against employing married women in the schools.

But it is not the well-qualified candidate who is in the worst predicament. These can turn to other work of one kind and another, even if uncongenial work. It is the youngster with perhaps one year beyond high-school training, or one or two summer sessions; or, more pathetic, the man and woman beyond middle age, who are unable to find locations, and worse still, find little else they can do.

The Tragedy of Older Men

These older school people, men especially, are "up against" a hard proposition. Schoolwork has dug deep grooves in their minds, and it is hard to turn to other lines of thinking, other vocabularies, and other physical activities. Their interests cannot be transferred with the degree of enthusiasm needed for success in a new business or profession. Too often it not only is a mistake but a tragedy for a man to stay in public-school work beyond his forty-fifth year. There are notable exceptions, to be sure, where the tragedy would be in leaving school-

work; men cut out by nature to be school executives, who grow wiser, kindlier, more successful, and more beloved with each succeeding

But it is a fact that too many are not schoolmen but merely are in the school businessjust why they are there no one could tell—they themselves least of all. The chance is that they started teaching when young; they have succeeded in getting themselves elected one place and another until the thought of trying new work makes them even more panicky than does the thought of school election. Every experienced teachers' agency manager has seen cases of such men who were in fairly good positions ten years ago, each move taking them into smaller and smaller schools until they are discouraged, out of touch with modern trends in school management, annoyed with youthful activities, and striving continually to pull the school back to the colorless pattern of 25 years

It is a tragedy all around, for the small school needs the sane, but "peppy," young superintendent even more than the large school needs him. These older men should have left schoolwork while they still had energy to build for their old age in some other occupation. The exceptional schoolmen will not be permitted to leave at any age; the ones who are average or less and who continually have to fight for their jobs are the ones who ought to look to the future and get out before they are shunted out.

Other Fields Open Probably fifty per cent of the young women posing as teachers ought to be doing something else. There are many attractive fields for high-

school graduates to enter, but the poor youngsters don't know this. How many freshmen, for example, realize the splendid field offered in nurses' training, or the avenues this training opens for them? If they think of this work at all, it is merely in the phase of bedside nursing. Graduate nurses can go into whatever line appeals to them most: there is work in children's hospitals, there is specialized work as ward supervisor, surgical nurse, head nurse; work may be had with groups of doctors, in city, county, and Red Cross work; there is a wide field for X-ray specialists, and specialists in giving anesthetics; for home-economics students there is a splendid field as hospital dietitian. Also there is the work of school and college nurse, with a salary higher than that paid in the same schools to teachers of academic

Library work offers equal chance for specializing. Work in children's department, as reference librarian, as school or college librariana well-trained librarian with pleasing personality can eventually choose her specialty quite as definitely as if she were a teacher. There is a shortage of librarians for the schools and colleges, most delightful work for young women who like such surroundings. Teachers'-agency managers can never find enough well-qualified school nurses and school librarians to satisfy the demand.

From the agency viewpoint the strong plea to school people is this: If young, don't let yourself get into a groove; if older, for your future's sake take inventory, see where you stand and where you are headed; if necessary, call for help in getting out of your groove; for the first thing you know, the groove will be a rut, and the rut a hole; the hole will close over you and you will find yourself buried before you are dead.

## Paternalism in the Purchase of School Supplies and Equipment

The average school system in this country is able, through its professional executive factors, to determine upon and purchase the paraphernalia that goes into and about the school plant. Even in the rural districts there is sufficient knowledge as to the tools that enter into the operation of a schoolhouse and the business judgment necessary to buy them advantageously. Besides, the competitive character of the school-supply business obviates excessive

When some school official somewhere has made an unwise purchase there are those who want to introduce reforms whereby all school officials must come under some form of straightjacket rule. The paternalistic idea is championed. Someone must assume the prerogatives of the school officers and act as a father over them all.

A few years ago the writer made a study of the school-supply business as conducted in Ger-

\* THE LITTLE RED SCHOOLHOUSE

The little red schoolhouse that stood on the hill Is gone from our vision today. The voice of the teacher who kept it is still. The heads of the children are gray. The schoolmates are scattered in journeyings far Down the lengthening path of the years, And Memory's voice from wherever they are Brings the laughter of old to our ears

The little red schoolhouse is living today In temples of learning more grand. The children are treading an easier way Advantage awaits their command. Whatever its grandeur, whatever its fame, Whatever its helpfulness, still The school that bestows them so bountifully came From the little red house on the hill.

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many. He found that it was customary there to clothe some commission with arbitrary powers to select and purchase all school supplies. head of the commission was an autocrat. The local school authorities had no choice in the matter but to accept what was given them. One of the school-supply magnates boasted to the writer that even a suggestion would be deemed presumptuous and a reflection upon the mighty man who ruled the roost in the matter of school supplies.

Such methods are not conceivable in a country like our own where the self-assertive and democratic spirit prevails. And yet the state of California enacted a law last winter whereby it is made compulsory on the part of all school districts, with the exception of the first, second, and high-school districts, to accept such school supplies as the county superintendent may purchase for them. The purpose here is to obyiate unwise purchases and to cause a money saving.

In commenting upon this phase of the subject the Western Journal of Education, published at San Francisco, says:

"If any saving is made through bulk purchases under the new cooperative plan, it is very likely to be more than dissipated in the additional expense incurred in putting it into effect. It means that practically 58 counties will have to go into the school-supply business, carrying 58 warehouse stocks, with the necessary distributing machinery and requiring a vast expenditure of funds in order to give service to the schools, a service which is now freely rendered by a few large school-supply dealers carrying enormous stocks often running into hundreds of thousands of dollars, and who maintain complete and highly trained organizations

to meet the enormous demands of the very seasonal school-supply business."

In further comment upon the competitive phases of the school-supply industry and some of the lapses which attend the purchasing factors, the same publication says:

"It is probably true, as charged, that many abuses crept into the method of supplying the individual district, but these so-called abuses were being rapidly corrected by the higher ethics governing modern business, by the gradual elimination of the irresponsible or 'wildcat' agent, by the publicity surrounding every public business transaction, and by the efforts of the houses themselves who were sufficiently responsible and substantial to remain in the business year after year.

"The sale of school supplies, we understand, has always been highly competitive; wholesale prices or less have been consistently the rule, and in addition school districts, especially the smaller districts, have been notoriously lacking in promptness in paying their bills for merchandise, thus putting on the merchant the burden of carrying the account for six months or longer, even though the margin of profit be frequently less than on any ordinary commercial transaction which is liquidated in thirty days."

This demonstrates that here and there school officials may have been lax in meeting their obligations, but it does not argue that the time has arrived when every prompt and businesslike school official must be brought under a paternalistic system. It does argue, however, that some state or county authority must caution, as this is done in other matters of school-administrative effort, to exert promptness and expedition. If mere caution does not prove effective it is time enough to inaugurate rules. The negotiations between buyer and seller usually find their own adjustments. The man who does not pay his bills usually finds it difficult to make advantageous purchases. Sooner or later the lesson comes to every man that the rules of modern business cannot well be violated.

The fact remains that American school administration does not tolerate the paternalistic spirit. The very mission of that administration, which prepares for citizenship in a self-governing nation, calls for principles and practices which recognize the doctrine of self-determination. The democratic idea is fundamental and must first be inculcated in the schools. Surely, the idea cannot be ignored in the administration of such schools, and thus violate the spirit upon

which the Republic is founded.

#### Married-Women-Teachers Problem

The question of employing married-women teachers came under serious consideration by the board of education of Columbus, Ohio, recently, and resulted in a definite rule on the subject. Superintendent J. G. Collicott was prompted to initiate the matter by submitting the following statement:

"There are now 159 married women employed as regular teachers in the schools. This constitutes about 20 per cent of the teachers. A large number of married substitute teachers are also employed. This large number causes the schools to be charged with discrimination against unmarried teachers and causes constant trouble in hiring teachers.

"Neighboring cities, including Cleveland and Dayton, have made more stringent rules in barring married-women teachers, with the result that many of these women are seeking employment here. Husbands of married women often gave the superintendent considerable trouble in attempting to influence them as to whom they should hire."

President Cecil J. Randall of the board expressed himself on the question of barring married-women teachers as follows: "I approve the measures for social reasons. It is unfair that there should be two breadwinners in a family. I believe in one head of a family as far as breadwinning goes. Often homes are neglected when women work.

"The institution of marriage is mainly for one purpose—the establishment of a home and raising a family. The laws of Ohio compel women to take care of their children, yet one of the chief causes of juvenile delinquency is that women go out and seek an independent career instead of keeping the home fires burning."

Miss Estelle Becker, a member of the board, favored the employment of married-women teachers as substitutes, but not as regular teach-Miss Juliette Sessions, another member, firmly opposed the measure. Mrs. George F. Arps would not vote either way. When the rule was brought to a vote there were four in favor, one against, and one not voting.

Arthur R. Leonard, a high-school teacher and member of the legislature, gave out the following interview: "I believe that teachers should be judged according to their individual ability and not as to whether they are married or unmarried. If a teacher can do her schoolwork satisfactorily, I see no reason why marriage should decide whether she be employed as a regular teacher.

"There should be some distinction between married women, as it was true that some married women are teaching that did not need the employment while others did. In some cases, undoubtedly, a married woman who both teaches and manages a home finds her interests divided and cannot do full justice to both.

"Some substitute teachers have regular work and receive all the advantages of married women, it is true, but since there are apparently arguments on both sides, I think each case should be treated individually instead of making a general law."

Vernon M. Riegel, the state superintendent of public instruction, stated that: "The problem of forbidding married women to teach is a matter to be settled by each school board. There are no state laws relative to the subject. The state school department has not noticed any trend toward banning married women."

This new Columbus rule provides that in the future no married women shall be employed as new teachers, and that at the end of their

contract year, no women who have married shall Columbus gives be offered reemployment. teachers contracts for but one year at a time, and there is no presumption of tenure.

#### VIADUCT FOR SAFETY OF SCHOOL CHIL-DREN ACROSS PASADENA STREET

That the protection of the lives of school children is considered of first importance in Pasadena is exemplified by the new, attractive, reinforced-concrete viaduct across Dakota street at the Washington Junior High School. This viaduct, erected at a cost of \$8,500, connects the main building with the gymnasium and athletic field on the opposite side of the street.

Previously it was necessary for the pupils to cross the street on the surface and although there was a crossing gate, it was impossible to keep traffic closed off enough of the time to accommodate the great numbers constantly desiring to cross. Now pupils and teachers can cross in perfect safety at any time, either singly or in a body.

The structure does not mar the general architectural effect of the group of buildings, but in joining the two buildings gives an effect that is quite pleasing. It is said that other schools in various places are inquiring in detail about this viaduct with a view of adopting similar measures.

#### THE NEW YORK CITY SCHOOL BUDGET

Here is a school budget which deals in large figures. The total contemplated for 1928 runs \$125,748,077.13. Of this amount, \$107,915,607.75 will go for salaries of teachers and supervising staff, \$7,176,283.39 for administration, and \$10,656,185.99 for incidental and contingent expenses, including ordinary building repairs, fuel and light, supplies, textbooks, apparatus, furniture and fixtures, etc.

The regular state school support amounts to \$26,197,681.42, to which has been added \$14,000,000 by the last legislature for increased teachers' salaries, making a total of \$40,197,681.42, which deducted from the \$125,748,077.13 leaves the city of New York to raise \$85,550,395 by taxation. In addition to this amount the sum of \$353,732.75 will be required for the retirement system, \$343,845.60 for redemption of bonds and tax notes, and \$35,000,000 for the acquisition of sites and the construction of new school buildings.

The budget, which covers 130 large pages, goes into elaborate detail as to the several funds. Every item is noted. The board of education consists of George J. Ryan, president; M. Samuel Stern, vice-president; Mrs. Margaret McAleinan, Ralph R. McKee, C. C. Mallenbauer, Arthur S. Somers, and William J. Weber.



CONCRETE VIADUCT AT THE WASHINGTON JUNIOR HIGH SCHOOL, PASADENA, CALIF.

## KEEPING SCHOOL EXPENDITURES WITH-IN APPROPRIATIONS

Wilbert C. Wehn, Secretary, Johnstown, Pa.

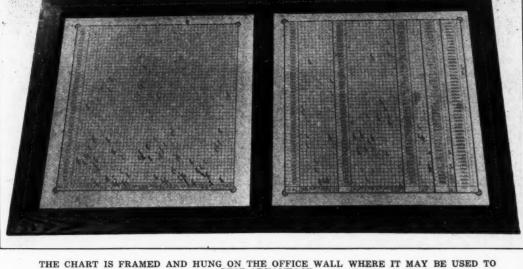
To know the status of all appropriations at any time is a matter which vitally concerns every school executive. It is true, most districts make up a statement at the end of the month, showing the appropriations, the expenditures, and the total unexpended balances, but such a statement never shows whether expenditures to date are above or below the budget expectations, or whether the unexpended amount will or will not be sufficient to carry out the year without a deficit. Neither does it show whether collections of revenues are being made as anticipated.

In these days of rising school costs, of increased indebtedness, of greater demands upon the pocketbooks of taxpayers, a constantly increasing amount of attention is being turned to efficient expenditure of school-tax monies, or, in other words, the return to the community for the support given by it to the schools.

I have never seen anything on dividing the budget by months and checking performance each month in a concrete way. Dividing the annual budget does not mean simply dividing the total by twelve, as shown in a recent article in the School Board Journal by Mr. Peel.1 One must take into consideration the actual time of making payments, and divide the budget accordingly. This division of the budget also makes it possible to report to the board of education on the actual condition of appropriations in the most concise manner I have ever When differences are shown—and they are bound to occur—the executives can easily determine whether the budget was divided incorrectly or whether expenditures have been inside or beyond appropriations, or whether revenues are being properly collected.

Readers of the Journal who read Mr. Peel's article will be interested in the photograph of a graphic chart and the graph itself which shows the details of a device which is serving as an inestimable aid to the writer and the Johnstown board of education in keeping school expenditures within appropriations.

The chart is made by means of colored pins. Each appropriation, or budget requirement set up by the board, is shown by a key number at the bottom of the chart. Horizontal axes in the chart differ to allow for greater limits to some accounts. The school budget is divided by months, and the budget amount yet to be available at the end of the fiscal month is shown by a black pin in the proper position for each account. The actual unexpended balance is



THE CHART IS FRAMED AND HUNG ON THE OFFICE WALL WHERE IT MAY BE USED TO BEST ADVANTAGE.

then plotted in the same manner by either a red pin or a yellow pin. If the actual unexpended amount is less than the budget unexpended amount, the red pin-a danger signal -is used. If the actual unexpended balance exceeds the budget estimate, then the yellow pin—a clear signal—is used. The same prin-

ciple is true, though in the reverse, for budget requirements.

Thus, the business manager is always enabled to know when there are funds sufficient for any expenditure or whether a certain appropriation, like a salary item for instance, which is inelastic, will be overdrawn.

## The Improvement of Teachers in Service

Mr. F. D. Boynton, superintendent of schools of Ithaca, New York, in a recent communication points out that in teaching, as in all other lines of endeavor today, it has come about that promotion seeks only those who are awake and prepared. While in the past, far too many teachers considered their diplomas as a kind of mattress whereon their minds might lie in a state of coma, this is not the situation today. At the present time thousands of teachers are pursuing special courses or making travel tours to improve their teaching ability in the classroom. Commenting on the inauguration of plans for the improvement of teachers in service, Mr. Boynton writes as follows:

The tens of thousands of teachers attending summer terms and taking extension courses bear eloquent testimony to this mental alertness and sense of responsibility. In teaching, as in all other forms of endeavor, it has come about that promotion seeks only those who are awake and prepared; while the David Swans, the few who are left of that vanishing race, continue to repose upon their intellectual mattresses, only awaking now and then to complain of the

world's injustice. Boards of education and superintendents of schools are thus face to face, not so much with the problem of spurring on unwilling workers, as with that of providing opportunity for a growing body of ambitious and progressive teachers, and of properly rewarding those who take advantage of the opportunities provided.

Any adequate plan for the improvement of teachers in service should provide both opportunity and reward-opportunity for the noncollege-trained teacher to begin and pursue a college course, opportunity for the college trained to go on with graduate work, and adequate reward for both. From the standpoint of the schools the objective is, of course, improved public service by the building up of a more permanent corps of more highly trained and broadly educated teachers. In order to achieve this, recognition should be given only for work of actual college or graduate quality. Summerterm and extension courses, while they are to be recommended if conditions are such as to make them necessary, are at best less desirable than are the courses offered by the faculty of an institution during the regular scholastic year. Whatever plan is adopted for the improvement of teachers in service, it should be definite, carefully worked out in detail, and after adoption by the board of education, it should be published and made available to anyone interested.

Candidates desiring to profit by such a plan for advancement should be required to register with the superintendent for advanced study. submitting the college courses they wish to take and securing his approval. In the case of undergraduate work, the emphasis should be laid upon basal studies in English, the foreign languages, sciences, mathematics, and history. Not more than one fourth of the work should be professional; and not more than one fourth in undergraduate work should be in the subject taught by the candidate. The courses should not only be scrutinized, but also the institutions offering them. Where institutions offer courses for degrees which are general and almost worthless, they should be rejected. Superintendents are concerned not with the degree, but with the (Concluded on Page 144)

<sup>1</sup>A Simple System of Budget Control, by A. J. Peel, September, p. 48.

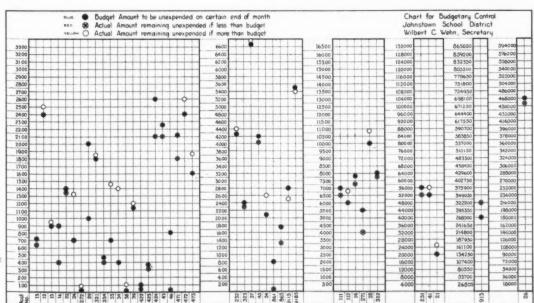


CHART FOR KEEPING TRACK OF EXPENDITURES, BUDGET ALLOWANCES, AND APPROPRIATIONS. Devised by Mr. Wilbert C. Wehn, Secretary of the Board of School Directors, Johnstown, Pa.

to principals in villages and small towns. The

figures speak for themselves. The salaries are

paid to superintendents of schools in cities,

ranging in population from 2,500 to cities of

## National Wealth and Teachers' Salary Costs

A study of the nation's financial ability to provides a graphic picture of the salaries paid lift the teacher compensation to a professional level has recently been made by the National Education Association. The study brings out the basic fact that the wealth of the nation, namely, the value of all tangible property is estimated at \$355,300,000,000, and that the annual gross income is estimated at \$89,862,-000,000. Finally, the statement is made that the total expenditure for all the schools amounts to \$2,717,798,000.

The contention is made that in the light of the nation's income, twenty-five billions of which are regarded in the nature of excess earnings which are expressed in new investments, that the expenditure of two and one-half billion for education is but nominal. In brief, that the

> MEDIAN SALARIES PAID VARIOUS GROUPS CLASSROOM TEACHERS

COUNTRY SCHOOLS

Consolidated Schools

CITIES 2500 to 5000.

Cities 5,000 wi0000

Hysh-Schools

High Schools

Elementary Schools High Schools

Mysh Schools

CITIES 100,000 and a

100,000 and over. The figures are shown in Chart III. The compilers aim to show also what compensation is paid in the industries, in commerce, and in the government service. The computation made would show that the annual earnings of the industrial worker average \$1,309. The skilled workers in the larger cities earn an average yearly wage of \$2,502, and those in

clerical work \$1,908. First-class professional employees earn an average of \$5,675 a year; second class, \$3,910; and third class, \$3,000 a

The total number of persons employed in gainful occupations is 44,600,000. Of this num-

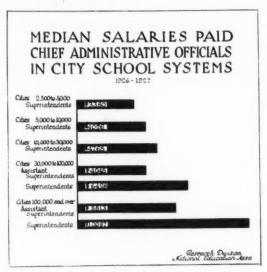


CHART 3.

ber 845,000 are engaged in the profession of teaching. The study advances the following observation: A person who goes into the open market of gainful employment and whose earning power turns out to be very much below the average may expect an income of \$700; if he this field, he may expect an income of \$475. A person who sells his services in the open market and whose earning power is slightly below the average may expect to earn \$1,500 a year. One who enters teaching and earns a salary slightly below the average in this field may expect \$1,040 a year. One who earns the typical income of \$1,700 in the open market will, if equally successful among teachers, earn \$1,250. One who has above average success in the open

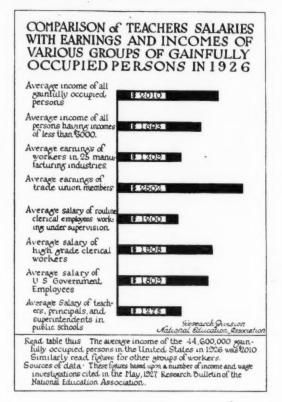


CHART 4.

market may expect to earn \$3,000. Above average success in teaching means a salary of \$2,490. A person sufficiently successful in the open market to earn \$10,000 may expect to earn \$3,875 if he is equally successful among

Chart IV shows the average income in the several gainful occupations as compared with that of the professional workers in the school service.

## CHART 1.

nation possesses the ability to finance the schools to the high-water mark and to that end is able to adequately compensate the professional forces.

The study then presents a series of charts which deal with the salaries paid to the rural and urban school teachers. The first of these, Chart 1, shows the median salaries paid in the country schools. Next, we have Chart II which

enters teaching and is equally unsuccessful in BEWARE OF TOO MUCH THEORY

Two Replies

EXPERIMENTATION AND SCHOOL **PROGRESS** 

By a Young Superintendent

In the September issue of the School Board JOURNAL, I read an article entitled, "Beware of Too Much Theory," in which the writer berated young superintendents because of their inexperience and theoretical tendencies and went so far as to state, that he would not hire a young superintendent no matter how capable he might be.

I want to agree with the writer of the article on one thing, and that is, his idea that no man should go into a school system and start turning things upside down, until he has a thorough understanding of the conditions in his particular situation. I cannot agree that only young men are guilty of wrongdoing in this regard, because I know of many older men who made radical changes in new situations, to show what seemed to them progress.

If young men are the only ones who are trying out theories, then we are indebted to them for a great deal of educational progress that fifty years. All improvements that modern educators accept as sound have come about as the result of experiments.

The Cautious Superintendent

We have had, and still have, too many oldtimers who are afraid to try anything new. A good definition of a nonprogressive schoolman or woman is one who, because of past experience, is wary and suspicious of a change. He is afraid to get too far away from traditional orders. Caution is a fine thing, and when linked with common sense, makes for excellent procedure in experimentation. Cleaving only to tradition means educational stagnation, in most

Teachers and administrators need educational rejuvenation at various intervals in their careers. Why condemn the young superintendent because he is anxious to get some of his teachers to attend a summer session, who, perhaps, have not graced the inside of a teachertraining institution in ten or twenty years?

Theory is often thought provoking. No one has to swallow it whole or even try it out. Sometimes a new theory is exploded which makes us cleave tighter than ever to our old ways. Other theories have shown us the crudehas been made in our schools during the past ness of old methods, and upon them, have been founded progressive ideas which have proved their worth.



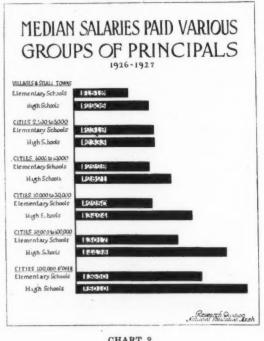


CHART 2.



C. E. BYRD HIGH SCHOOL, SHREVEPORT, LA.

## SOME RECENT SCHOOL BUILDINGS ERECTED IN LOUISIANA

#### A Description of the Work of Mr. Edward F. Neild, Architect, of Shreveport, Louisiana

In recent years the southern states have taken some rapid strides in the direction of more and better schoolhousing facilities. The most recent buildings are a matter of pride to the local communities, since they afford buildings which are beautiful in design, convenient, readily adapted to school needs, and economical in construction. In the matter of school buildings, Louisiana has not fallen behind, but is forging ahead with the rest of the southern states in rearing stately and commodious school buildings.

The buildings described in this brief article are the work of Mr. Edward F. Neild, of Shreveport, Louisiana, who has done considerable schoolhouse work and who has been successful in erecting buildings which are adapted to the special needs of the community, and are economical and practical in construction and operation.

#### The Byrd High School

The Byrd High School at Shreveport, Louisiana, was erected during the school year 1924-25 and was built to accommodate a student-body of 2,400.

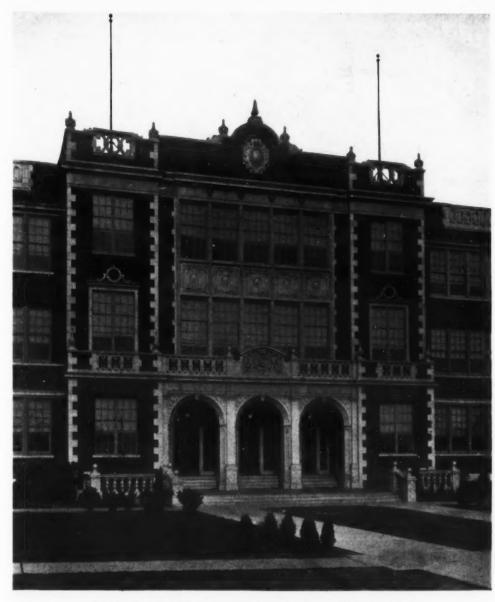
The building is three stories high, with a basement and sub-basement, and is of fireproof construction throughout. The exterior construction is of brick, with terra-cotta trimming. A slight slope of the ground from the front to the rear of the site places the entire basement above the ground level.

The gymnasium on the first floor is connected with the swimming pool, shower, and locker rooms by means of spiral stairs.

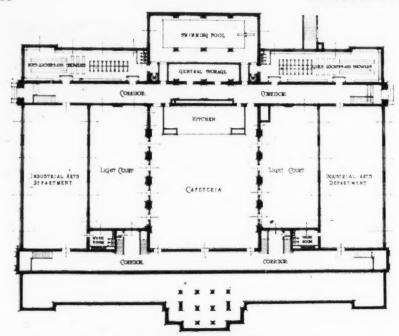
The auditorium, with the balcony, has a seating capacity of 2,000 persons and includes complete stage equipment for school theatricals, and a motion-picture booth.

The science laboratories are provided with an aquarium and a greenhouse sufficient for carrying on needed experiments.

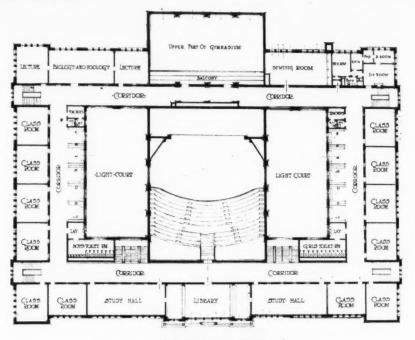




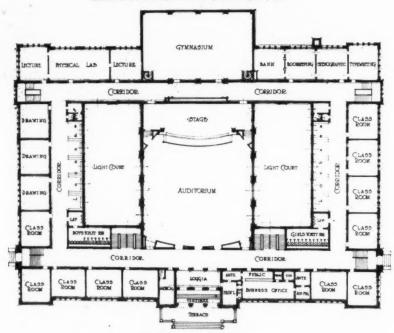
ENTRANCE DETAILS, C. E. BYRD HIGH SCHOOL, SHREVEPORT, LA. Edward F. Neild, Architect, Shreveport, La.



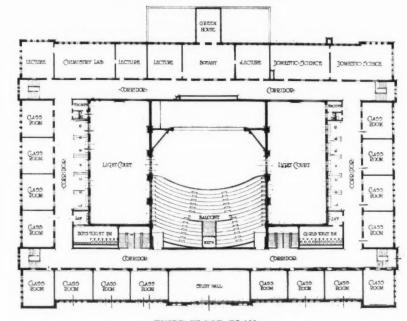
BASEMENT FLOOR PLAN.
C. E. BYRD HIGH SCHOOL, SHREVEPORT, LA.
Edward F. Neild, Architect, Shreveport, La.



SECOND FLOOR PLAN, C. E. BYRD HIGH SCHOOL, SHREVEPORT, LA. Edward F. Neild, Architect, Shreveport, La.



FIRST FLOOR PLAN.
C. E. BYRD HIGH SCHOOL, SHREVEPORT, LA.
Edward F. Neild, Architect, Shreveport, La.



THIRD FLOOR PLAN.
C. E. BYRD HIGH SCHOOL, SHREVEPORT, LA.
Edward F. Neild, Architect, Shreveport, La.

The cafeteria is equipped with every modern device and accommodates the student body in two sections in lunch periods of thirty minutes each. Two large light courts are on either side of the cafeteria, to furnish ample light and ventilation. The light courts also cover the industrial-arts rooms.

The home-economics department has a fiveroom model apartment completely furnished. Two large study halls, with library between, afford accommodations to 200 pupils.

The classroom floors throughout the building are of wood, while the corridor floors are of rubber tile. Steel lockers are installed in the corridors where they are accessible from all classrooms.

The mechanical equipment in the building includes heating and refrigeration plants located in the sub-basement, a vacuum-cleaning system, and a mechanical ventilation system. The refrigeration plant supplies the needs of the cafeteria, the kitchen, the domestic-science department, and the drinking fountains throughout the building.

The cost of the building, including heating, ventilation, and electric wiring was \$774,000, which is \$350 per pupil, or 28 cents per cubic foot. The cost of the furniture installed was \$61,000, which made the total cost \$835,000.

The Louisiana Avenue School

The Louisiana Avenue School at Shreveport, is a grade building, also erected during the year

1924-25. It affords accommodations for 800 students.

The building is located on a ten-acre site overlooking the city. The grounds are open for community play purposes and are provided with all forms of playground equipment. They are landscaped to add to the natural beauty of the site.

The structure is two stories high and is built of brick, with terra-cotta trimming. The corridors and stairways are of fireproof construction. The cafeteria at the rear of the auditorium seats an entire student body and is provided with every modern convenience.

The building is heated by steam and is provided with thermostatic control.

A special feature of the building is the covered playcourt which is used for play purposes in inclement weather and for outdoor gymnastics.

The building was erected at a cost of \$240,000, which is \$350 per pupil.

#### The Creswell Street School

The Creswell Street School is a grade school building, was erected in 1923-24, and is built to accommodate a student body of 675. The building is two stories high and is built of brick, with terra-cotta trimming. The corridors and stairways are of fireproof construction.

The building is heated by steam and is thermostatically controlled.

The cafeteria in the rear of the auditorium seats the student body and is equipped with all modern conveniences. A special feature is the covered playcourt for use in inclement weather, which also serves as an outdoor gymnasium.

The building was erected at a cost of \$190,000, which is at the rate of \$285 per pupil.

The Baton Rouge Junior High School
The new junior high school at Baton Rouge,
Louisiana, was erected in 1922-23 and accommodates a student body of approximately 750. The
building, which is of reinforced concrete construction, is built of matt-faced brick, with
terra-cotta trimming. The architectural design
is Tudor Gothic, with narrow-mullioned windows in groups of five.

The arrangement of the buildings provides for classrooms on the first and second floors; boiler room, cafeteria, domestic science, manual training, and auditorium occupy the basement and first floor. The basement is only slightly below the ground level, and, therefore, receives ample light and ventilation.

The auditorium takes the form of segments of a circle and seats 800 persons. The arrangement affords a good view of the stage from all parts of the room and also adds to the acoustical properties.

The building was erected at a cost of \$163,000, which includes plumbing, heating, and electric wiring, but excludes furniture.



LOUISIANA AVENUE SCHOOL, SHREVEPORT, LA.

#### INCREASE IN SCHOOL-BUILDING COSTS

The United States Bureau of Education has issued the results of a survey which shows that expenditures for sites, buildings, furniture, libraries, and apparatus of elementary and secondary schools combined increased from \$35,450,820 in 1900 to \$433,584,559 in 1925. The number of pupils enrolled in public high schools jumped from 519,251 in 1900 to 3,650,903 in 1925.

The survey also reveals that school property increased in value 673.05 per cent in the past 25 years, indicating, it is stated, that larger and better buildings have replaced smaller buildings of lesser value.

Since 1925 marks the close of the first quarter of the twentieth century, advantage is taken of the opportunity to review the progress made in that period and to show a few of the trends. Certain increases and improvements over 1924 are worthy of notice.

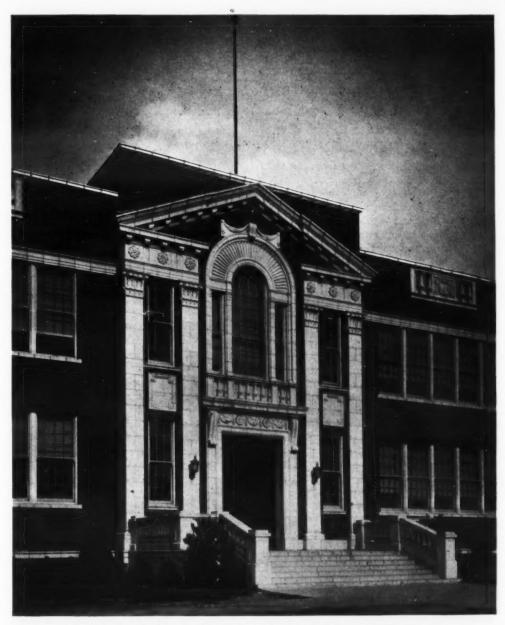
Total enrollments increased from 24,288,808 to 24,650,291, while high-school enrollments increased from 3,389,878 to 3,650,903. Average daily attendance increased from 19,132,451 to 19,838,384, and number of teachers from 761,308 to 777,945.

The number of school buildings decreased 4,421, but the value of school property increased \$507,548,186. Total expenditures increased from \$1,820,743,936 to \$1,946,096,912.

From 1900 to 1925 the population of the United States increased 50.11 per cent. The birth rate has been falling off, so that the population of school age has not kept pace with the general population. The group 5 to 17 years of age, inclusive, has increased 38.78 per cent, while the 5-to-14-age group increased 39.34 per cent.

Total enrollments in public schools have increased 59 per cent during the past quarter of a century. The greatest increase is in the high school, 603.11 per cent, while the elementary-school enrollment has increased only 40.15 per cent, an increase slightly greater than the increase in the school census.

Edward F. Neild, Archtiect, Shreveport, La.



DETAILS OF ENTRANCE, LOUISIANA AVENUE SCHOOL, SHREVEPORT, LA. Edward F. Neild, Architect, Shreveport, La.



FIRST FLOOR PLAN.
LOUISIANA AVENUE SCHOOL, SHREVEPORT, LA.
Edward F. Neild, Architect, Shreveport, La.

SECOND FLOOR PLAN.
LOUISIANA AVENUE SCHOOL, SHREVEPORT, LA.
Edward F. Neild, Architect, Shreveport, La.

The number of pupils in average daily attendance has increased 86.58 per cent during this period, and the number of teachers, 83.89 per cent

The number of school buildings has increased only 4.26 per cent since 1900. This low increase is due largely to the fact that many one-room school buildings have been replaced by union, consolidated, or centralized schools, one new building taking the place of four or five smaller buildings. The number of one-room schools is smaller by 37,175 than it was in 1918.

In 1920 a salary of \$871 bought less goods than did a salary of \$386 in 1905, the difference amounting to 46 of the 1913 dollars. In 1925 it took an average salary of \$1,252 to purchase as much as \$726 would have purchased in 1913.

One element in the increasing cost of public schools during the past six years is the resumption of building programs that were curtailed during and just after the war period. In 1920, outlays represented 14.8 per cent of the total expenditures; in 1925 they represent 22.3 per cent.

The total cost of outlays, sites, buildings, and contents for 1925 was \$433,584,559, or more than four times the amount spent in 1915, \$102,756,375, and nearly three times the amount for 1920, \$153,542,852.

The rapid increase in the number of highschool pupils is another factor in increasing costs. The cost of educating a high-school pupil is generally from two to three times as much as the cost of educating an elementary grade

pupil.

In 1924 the cost per pupil enrolled in the high schools was \$173.72 and in the elementary grades \$58.93. The public high-school enrollment does not as yet show any signs of slowing up on the rapid increase it has been making for many years past.

The increase in high-school enrollment in 1925 over 1924 is 261,025, and this is greater than the average annual increase from 1922 to 1924, and more than 52,000 greater than the annual increase for the past 10 years. Again, the junior-high-school administration costs more than that for elementary schools.

Enrollments in public high schools from 1915 to 1925, and the trends for 1926 and 1927 are shown. In 1915 the public-high-school enrollment was 1,561,556; in 1916, 1,710,872; in 1918, 1,933,821; in 1920, 2,199,389; in 1922, 2,873,009; in 1924, 3,389,878; and in 1925, 3,650,903.

#### REFINANCING A SCHOOL-BOND ISSUE

The city of Chariton, Iowa, has refinanced its school debt in an interesting and advantageous

manner. The following account of the board's financial activities, prepared by Mr. J. R. Cougill, superintendent of schools, tells the complete story:

"In September, 1920, the Independent School District of Chariton voted bonds in the amount of \$185,000 for the purpose of erecting and equipping a new high-school building and purchasing a site therefor. On account of the high prices of that year nothing was done until the fall of 1921, at which time the bonds were sold. On account of the high rate of money, we issued the bonds for five years and sold them at 6 per cent, with a slight premium. The bond issue was insufficient to meet the cost of the building. but by using money from funds on hand we were able to purchase a site and complete and equip our high-school building at a cost of approximately \$270,000. When the building was completed, there were no outstanding warrants, all bills having been met by the original bond issue, plus funds on hand.

"On November 1, 1926, we were able to reduce the bond indebtedness to \$150,000. The new bonds were sold at 4½ per cent, with a premium of \$1,700. The bonds are arranged so that \$10,000 are to be taken up each year for fifteen years. At the end of this time the entire indebtedness will have been liquidated."

#### THE ARCHITECTS' CODE OF ETHICS

School boards and their building committees occasionally develop misunderstandings and troubles with the architects employed on schoolbuilding projects due to the fact that information is lacking concerning the service of the architects and their professional relations. Sometimes, too, difficulties arise from the fact that the architects themselves are not clear concerning their own conduct and obligations and are responsible for acts which do not safeguard all the interests entrusted to them. As a means of insuring a high standard of ethical practice and conduct the American Institute of Architects has adopted a statement of "Principles of Professional Practice." These principles supersede an earlier canon of ethics and will be found useful and informational to school boards:

The profession of architecture calls for men of the highest integrity, business capacity and artistic ability. The architect is entrusted with financial undertakings in which his honesty of purpose must be above suspicion; he acts as professional adviser to his client and his advice must be absolutely disinterested; he is charged with the exercise of judicial functions as between client and contractors and must act with entire impartiality; he has moral responsibilities to his professional associates

and subordinates; finally he is engaged in a profession which carries with it grave responsibility to the public. These duties and responsibilities cannot be properly discharged unless his motives, conduct, and ability are such as to command respect and confidence.

Upon the foregoing basic principles the experience of the Institute leads it to advise in respect to specific instances as follows:

1. The relation of an architect to his client is one depending upon good faith. An architect will explain the conditional character of estimates made before final drawings and specifications are complete and will not by careless statements mislead a client as to the probable cost of a building. If the architect guarantees an estimate he becomes legally responsible and he should not make any guarantee which affects the quality of his advise.

2. The contractor depends upon the architect to guard his interests as well as those of the client. An architect will condemn workmanship and materials which are not in conformity with the contract documents but it is also his duty to give every reasonable aid toward a more complete understanding of these documents so that mistakes may be avoided. He will not call upon a contractor to make good oversights and errors in the contract documents.

3. An exchange of information between architects and those who supply and handle building materials is encouraged and commended but the use of the free engineering service which is offered by manufacturers and jobbers of building materials, appliances and equipment is accompanied by an obligation which may become detrimental to the best interest of the owner.

4. The American Institute of Architects has set forth a schedule or guide by which the proper profesional charges may be determined. The architect's charges for his professional service shall be made to the client only, and he will not receive commissions, fees, gifts, favors or any substantial service from a contractor, or from any interested person other than the client. He will not knowingly compete with a fellow architect on a basis of professional charges.

5. An architect in his investments and in his business relations outside of his profession must be free from financial or personal interests which tend to weaken or discredit his standing as an unprejudiced and honest adviser, free to act in his client's best interests.

6. An architect will not advertise for the purpose of self-laudatory publicity, but publicity of the standards, aims and progress of the profession is to be commended. He will not take part or give any assistance in obtaining advertisements or other support toward meeting the expense of any publication illustrating his work.

7. An architect may introduce to a possible client the service which he is able to perform but will not, except under unusual circumstances, offer to continue this service without compensation until it has been approved; and in no case will he offer this service in competition with others except as provided in Article 9.

8. An architect will not falsely or maliciously injure, directly or indirectly, the professional repu-



CRESWELL STREET SCHOOL, SHREVEPORT, LA.

tation, prospects or business of a fellow architect. He will not attempt to supplant another architect after definite steps have been taken by a client toward his employment; nor will he undertake a commission for which another has been previously employed until he has determined that the original relation has been fairly and properly terminated.

9. The American Institute of Architects has issued a Circular of Information in regard to Competitions. An architect will take no part in a competition which does not include the provisions which experience has found to be necessary if the best interests of the owner and of the architect are to be safeguarded.

No set of rules can be framed which will particularize all the duties of the architect in his various relations with his clients, with contractors, with his professional brethren and with the public. The principles that have been outlined should, however, together with such circulars and codes as the Institute may from time to time promulgate, govern the conduct of members of the profession and should serve as a guide in circumstances other than those enumerated. Since adherence to these principles is the obligation of every member of the American Institute of Architects, any deviation therefrom is subject to discipline in proportion to its serious-ness. The Committee on Practice and the Judiciary Committee and finally the Board of Directors of the American Institute of Architects shall have sole power of interpreting these Principles of Professional Practice and their decisions shall be final, subject to the provisions of the Constitution and By-Laws,

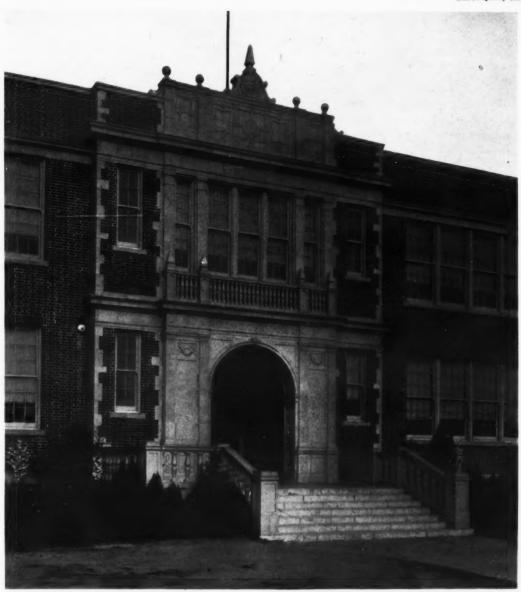
## SCHOOL-BUILDING PRACTICES IN EASTERN CITIES

#### Chicago Committee Reports on a Study of Schoolhousing and Construction in a Selected Group of Cities

The Chicago board of education has received the report of a special committee assigned to the task of making a comprehensive study of schoolhousing and construction problems in a group of eastern cities. The itinerary of the committee included the cities of Detroit, Buffalo, Boston, New York, Philadelphia, Pittsburgh, Washington, Cleveland, Cincinnati, and St. Louis.

\* In each of the cities visited conferences were held with the school-board officials and the conferences were followed by visits and inspections of the newer-

Edward F. Neild, Architect, Shreveport, La.



DETAILS OF ENTRANCE, CRESWELL STREET SCHOOL, SHREVEPORT, LA. Edward F. Neild, Architect, Shreveport, La.



FIRST FLOOR PLAN.
CRESWELL STREET SCHOOL, SHREVEPORT, LA.
Edward F. Neild, Architect, Shreveport, La.

SECOND FLOOR PLAN. STREET SCHOOL, SHREVEPORT, LA. F. Neild, Architect, Shreveport, La. CRESWELL Edward

type schools of recent construction. For comparative purpose and for later study, a great deal of data were collected concerning different types of buildings found in the various school systems. The fullest cooperation was extended to the committee by school-board officials in all the cities visited. The conclusions drawn and the recommendations made by the committee are based on the data secured from this survey and on information secured in conferences with school officials.

The survey disclosed the fact that each city has been faced with the same situation as that which confronted the Chicago board of education in recent years-a lack of housing facilities-a shortage of permanent seating for school children arising from prewar as well as postwar conditions, and also from the greatly increased enrollment in the schools in recent years, especially in the high and technical

It was also noted that nearly every city has found it necessary to issue bonds for building-construction purposes to meet the demand for schoolhousing. Most of these bond issues were for fixed amounts and spread over a period of years.

In general, the type of construction adopted was that of reinforced concrete or a combination of reinforced steel and tile arches of wall-bearing or

skeleton type as the condition required.

The majority of the buildings visited were three or four stories in height, with the exception of New York City, where a number were five stories or more in height.

The increase in the cost of construction of the schools in the various cities was found to be on a par with the increase in the cost of construction in Chicago. The data showed that the cost of construction varied from 38 cents to 70 cents per cu. ft. for elementary-school buildings, the cost de-pending on the completeness of the buildings. The cost of high-school construction varied from 45 cents to 55 cents per cu. ft.

The study showed that there has been a trend toward standardization of school-building construction and equipment. The opinion of architects was that a larger unit of school building is more economical in cost of construction than a smaller building; also that operation and maintenance of larger buildings are more economical than that of smaller buildings.

The study of heating and ventilating systems showed that the central fan system with the split system of heating is still used in a majority of the school buildings. The central fan system furnished the required heating and ventilation and thermostatic control, and the split system of heating provides for sufficient direct radiation to take care of the heat losses through infiltration. In a few buildings, the unit system of ventilation has been installed. The advisability of recirculating the air was discussed, with the result that some cities do not permit the employment of this method, while some school boards are opposed to it even where it is permissible. The recirculation system is economical in operation and reduces the coal consumption.

The study of gymnasium equipment revealed that physical-education courses and equipment in the grade schools is so limited that it can be done without the use of apparatus. In a limited number of

school buildings, ceiling-hung apparatus has been installed.

It appears to be a general practice in nearly all school systems in the east to provide limited lunchroom facilities for children in the elementary schools. The lunches consist of light food prepared in the cafeterias of nearby high or junior high schools and brought to the lunchrooms in thermos containers. The lunchroom accommodations consist of a small room equipped with tables and chairs and a kitchen equipped with a gas range, shelving, and a cupboard.

A study of the maintenance and operation of school buildings showed that in the cities visited, engineers and custodians are paid on a direct salary basis instead of a contract basis, and that all helpers are employed and paid directly by the school board. In general, there are no fixed or set rules as to the number of cleanings required during the school year. Buildings are cleaned as often as necessary in order to pass muster and to satisfy the occupants of the building as well as the inspector in charge. In some cities the services of engineers and custodians were dispensed with during the summer months.

In most of the cities considerable attention has been paid to the standardization of furniture and equipment installed in the buildings. It was found that the adoption of a standard system had simplified the purchasing methods, lowered the cost of equipment, and eliminated much of the friction which arose between the business and educational departments. It was observed that rooms used for special activities, such as shopwork and domestic science, and nearly all departments of high schools and technical schools, had furniture and equipment of a high grade which was liberally supplied.

The study disclosed the fact that present requirements covering construction and equipment of Chi-

cago schools are not considered essential or necessary in other cities. An amendment of the present city ordinance will be prepared to more nearly meet the requirements of good school planning.

As a result of its study, the committee has made

the following recommendations:

That the board adopt a standard type of building for elementary school buildings, to be planned to meet the necessary educational require-ments, the initial unit of such building to be three stories in height, without basement, and containing a total of 32 rooms and a gymnasium.

That the board adopt an arrangement of rooms which will provide for future expansion and

later additions without excessive cost.

3. That the board locate school buildings on sites adaptable to landscaping and beautifying of grounds adjacent to and surrounding buildings.

That the board make a study of the heating and ventilating systems with a view of standardizing the mechanical equipment to insure greater efficiency and lower cost in operation.
5. That the board make an investigation as to

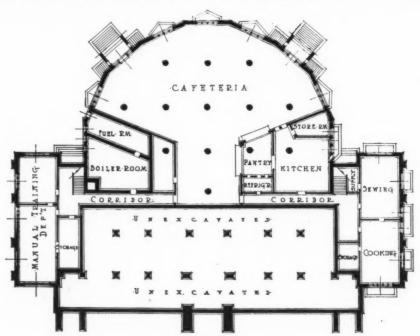
the need of installing ceiling-hung apparatus in gymnasiums of elementary schools.

That the board make an investigation as to the advisability of providing limited lunchroom facilities for children in elementary schools.

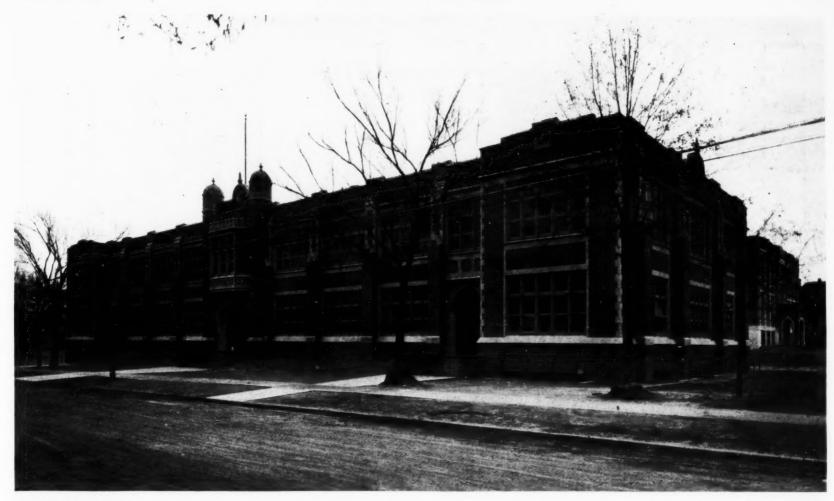
7. That the board make an investigation of the present system and operation of engineer-custodian service in the schools.

That the board adopt a system of standardization of furniture and equipment to be installed in the schools. (This has been done in elementary schools.)

9. That the board prepare an amendment to the present building sanitary code with a view of eliminating those requirements which tend to increase the construction cost of school buildings.



BASEMENT PLAN, JUNIOR HIGH SCHOOL, BATON ROUGE, LA. Edward F. Neild, Architect, Shreveport, La.



JUNIOR HIGH SCHOOL, BATON ROUGE, LA.

## NEW YORK CITY ADOPTS RULES FOR CARE OF SCHOOL BUILDINGS

—The board of education of New York City has recently adopted a standard set of rules and regulations governing the care of school buildings and their equipment. The new rules are a direct result of the recent survey which disclosed the fact that there were no coordinated regulations for this branch of the school service. The work of preparing the regulations was in charge of a committee consisting of Dist. Supt. John E. Wade, chairman; Charles G. Eichel, and Robert W. Rodman.

In addition, two subcommittees aided in the work. One was a committee on ratings and standards and the other was a committee on regulations.

The booklet is comprehensive in the scope of its usefulness. It includes information, rules, and regulations concerning the supervision of school premises, the hours of service, the employment of assistants, general regulations, and those concerning fire prevention, emergency dismissals and accidents, information about contracts and repairs, school supplies and equipment, indoor and outdoor cleaning, holiday cleaning, and many other topics.

Under the rules, the custodians or their assistants must be on duty every school day from 8 a. m. to 12 noon and from 1 p. m. to 5 p. m, and on Sat-

urdays from 8 a.m. until noon. Their duties include everything from instruction in the care of program clock systems to the supervision of the school grounds. The regulations provide that charges may be brought against the custodianengineers and their staffs on such counts as insubordination, unauthorized absence from duty, insufficient heating of building, lack of proper standards of cleanliness, and conduct unbecoming an employee of the board of education.

#### PAY-AS-YOU-GO POLICY AT DENVER

—According to the Denver, Colorado, survey of 1924, it is estimated that there will be needed in the period between 1926 and 1932, an expenditure of \$5,530,000 for school buildings and equipment, and \$1,145,500 for the purchase of sites and additional playground space for older buildings. After a thorough study of the financial problems of the district, the board of education reached the decision that the community should be put as nearly as possible on a pay-as-you-go basis for school building.

With this plan in view and to provide funds for the immediate erection of a needed unit of a junior high school in Park Hill, the board petitioned the state tax commission in October, 1926, for an increase of \$500,000 in the levy over the amount Edward F. Neild, Architect, Shreveport, La.

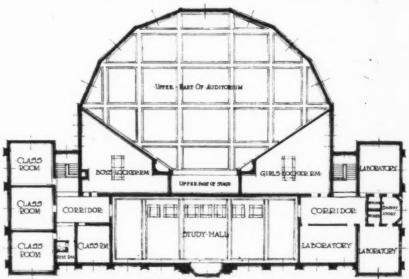
which the board could legally levy without recourse to the tax commission, the additional amount to be used for school buildings, with the understanding that if the grant were made by the commission, an equal amount would be available for building in each succeeding budget year. With the amount already available in the budget for capital expenditures, if the board's petition had been granted in full by the tax commission, the total amount that would have been available for new buildings and equipment prior to December, 1932, would have been \$3,615,000. If this policy had been carried out as outlined by the board, bond issues in the immediate future would have been small and there would have been a possibility of meeting the building needs of the schools without the issuance of any bonds.

Instead of granting the full request of the Denver board, the state tax commission allowed \$281,657 of the \$500,000 asked for. This amount will place the school district partially on a pay-as-yougo basis. To put it completely on this basis the board would be obliged to ask the commission for an additional increase in the near future.

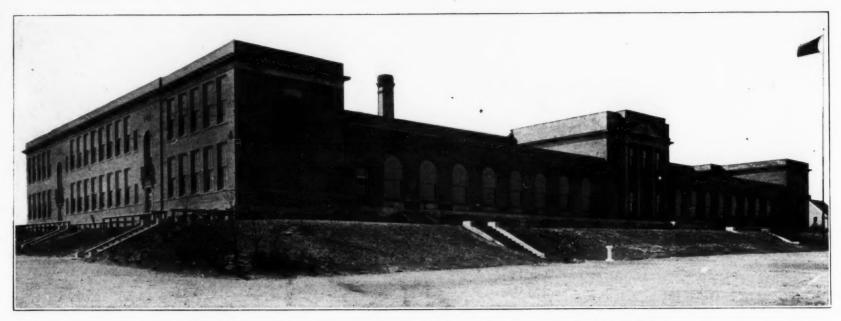
Under the law, the board of education of Denver may increase the number of dollars raised by the



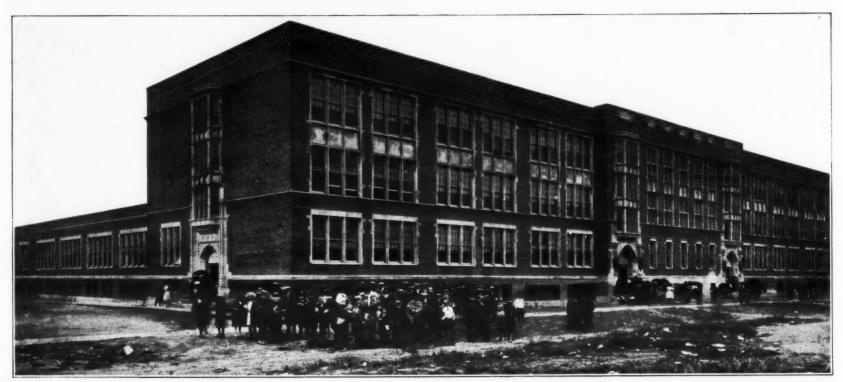
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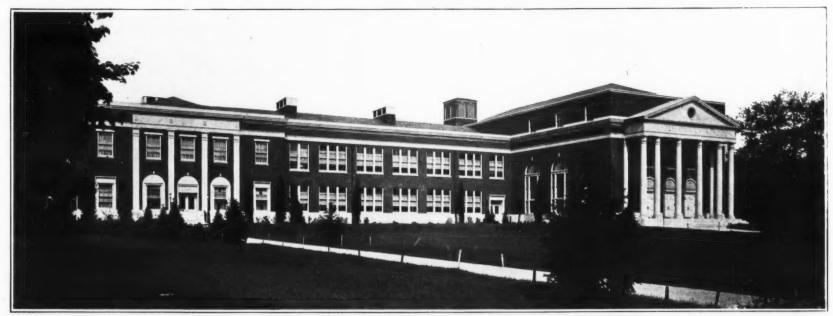
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Edward F. Neild, Architect, Shreveport, La.



BENJAMIN FRANKLIN SCHOOL, CLEVELAND, OHIO, W. R. McCornack, Architect, Cleveland, Ohio.



PATRICK HENRY JUNIOR HIGH SCHOOL, CLEVELAND, OHIO. W. R. McCornack, Architect.



HIGH SCHOOL, HEMPSTEAD, N. Y. Ernest Sibley, Architect, Palisade, N. J.

general and special levy five per cent in any given year over the previous year. A part of this five per cent is required to meet the normal growth of the schools. After the additional cost necessitated by growth is provided for there is not a sufficient

amount left from the five-per-cent increase to provide a building budget sufficient to put the schools on a pay-as-you-go basis.

The city of Denver must choose between a pay-

as-you-go policy and a policy of allowing to accu-

mulate building needs which will result in large bond issues. There is no more important school problem confronting the city. Denver should profit by its experience of the past twenty years and see the wisdom of adopting a pay-as-you-go policy.

## The Enforcement of Compulsory Attendance Laws by Local Officers

John F. Bender, Professor of School Administration, University of Oklahoma

Compulsory school attendance as a theory has been accepted by each of the states. The present laws effective on this subject are either of comparatively recent enactment or have been amended within the last decade. The dates of enactment or amendment are as follows: Two states, 1905; two, 1907; four, 1909; six, 1911; one, 1912; ten, 1913; one, 1914; nine, 1915; three, 1916; seven, 1917; and three, 1918.1 The recency of these enactments or amendments is evident, forty of them having been made since 1910.

A generally established principle in these attendance laws is that they shall be enforced by local officers. Local boards of education, local attendance officers, and local courts, such as justices of the peace, are usually designated in the laws as the authorities for their enforcement. It is the purpose of this inquiry to discover how the attendance laws, enforced by local officers, are operating at the present time.

The sources consulted for this information have been the reports of state and city superintendents of schools, state school surveys, city school surveys, and publications of the U.S. Children's Bureau. The most recent of these reports and publications have been referred to. They include 148 reports of state superintendents, 107 reports of city superintendents in 25 cities in 17 states, 20 city school surveys, and 12 state school surveys.

#### Local Enforcement a Failure

From these sources it may be concluded that the enforcement of attendance laws by local officers is not satisfactory. Such is the statement in the North Carolina report.<sup>2</sup> It recommends a law providing for an adequately paid county attendance officer selected by the county board of education on the recommendation of the county superintendent and working under his direction. The Minnesota report discloses a breakdown of the compulsory-attendance law due to the lack of enforcement:3 "Administration of the law is entirely in local hands, and hence is subject to all kinds of neighborhood limitations. It is doubtful whether the law will ever be effective until ultimate authority to direct its enforcement is placed in the state department of education, and provision made for following it up throughout the state."

The Illinois report states that it has been apparent for many years that the compulsoryattendance law does not work effectively in small villages and rural districts:4 "No truant officer can be secured by the local school board in such duties. Those interested decided that the best solution was to have a county truant officer under the direction of the county superintendent."

The Indiana report relates the experience of that state with a new law which made the state directly responsible for the enforcement of attendance.5 This law which provides for a state attendance officer, and empowers the State Attendance Board to fix the qualifications of county and city attendance officers, has greatly strengthened the personnel of the attendance officers. It has placed Indiana in the forefront in regular attendance."

The report of the year before is equally favorable: "When school was opened early in September, the percentage of attendance was far in advance of our expectations. The school officials were unable to care for the many chil-

dren brought in through the efforts of these officers. Schools had to be reopened and new schools established."6

State Attendance Officer Recommended The Maine report implies that local enforcement has not been successful.7 It recommends the appointment of a state attendance officer: "to be connected with the state superintendent's office to cooperate with school superintendents. committees, and local attendance officers to the end that all children between the ages of seven and fifteen may give regular school attendance. There are in our state even yet a large number of children growing up in ignorance without educational opportunity, not realizing the necessity of school attendance, which will give us another crop of illiterates for the coming generation."

In Maryland, a supervisor of the rural schools in 1922 finds one of the difficulties in the enforcement of compulsory-attendance laws to be the local justice of the peace, the sheriff, the constable.8

The degree of the difficulty is stated in the report of the previous year: "The need for more attention to the enforcement of the compulsory-attendance law in the counties having more than 29 per cent of their children (5 and under 18) not attending any school is obvious." Thirteen of the 23 counties of the state had more than 29 per cent of their children not attending.9

The New York report cites cases of neglect by local officials to enforce the attendance law. 10 The state department of education withheld the apportionment of state school money from 12 districts in 1915-16 for failure to enforce the provisions of the compulsory education and child-labor laws. Inspectors under the direction of the attendance division of the state department of education ascertained that in certain cities, villages, and rural districts, the compulsory-attendance law was entirely disregarded. 11

County Officer Recommended A county superintendent in New Jersey complains the lax enforcement of the compulsoryeducation law.12 This was due to the fact that the attendance officers are local officials and are unwilling to bring into court or even to serve warnings on their neighbors. Some of the local attendance officers had refused reappointment. The remedy recommended was the appointment of a county attendance officer for each county. The commissioner of education of New Jersey discussing the ineffectiveness of local enforcement of attendance writes: "It is asserted that there are cases where the attendance officers are appointed with the understanding that they are not to enforce the law to get the children into school and keep them there. . . . . . . . . . . . . . One defect of the present law is that the township

or district unit is not large enough. The local attendance officer is not likely to enforce the law against men whom he calls by their first names, and the result is that the law is laxly enforced or not enforced at all."

"What we need is an attendance bureau at Trenton whose sole business would be to give its attention to the prevention of this enormous waste in dollars and cents, to say nothing of the waste in education which is caused by inadequate enforcement of the compulsory-education laws. . . . Steps should be taken at once to remedy what seems to be our greatest de-

Local enforcement is responsible for districts of low attendance in New Hampshire: "There are districts where a low ideal of attendance is held by school-board and truant officers. . . . . School officers permit absences to accumulate and negligent parents to make school attendance of little importance."15

The experience of Nevada is stated as follows: "The law reads nicely and is effective in the large towns and cities, but in the rural sections it is a dead letter, and will remain so as long as the initiative for the enforcement is in the hands of the trustees. 16 They simply will not swear out warrants for the arrest of their neighbors. . . . If the superintendent had the judicial power to summon the parent or guardian of truant children directly before a district court for adjustment of the trouble, there would be little cause for further complaint."

A similar indictment occurs in the South Dakota report: "Almost entirely the enforcement of the compulsory-attendance law is in the hands of the local authorities who often are not interested in education and in some cases are not in sympathy with it. Hence, they do not see their duty clearly when it comes to taking active steps to see that children of school age are regularly in attendance at school. The state should have the right of demanding a change of venue in these cases to the circuit court and the penalty provided for by law should be sufficiently severe so that it would not pay from a financial standpoint to keep children out of school to perform various tasks at home. . . . The right to excuse from regular attendance at school should be placed in the hands of the county superintendent, rather than in the hands of the district board, except in cases of the larger cities. . . . In many cases, the enforcement of law by local authorities is a failure."17

#### Suggest State Intervention

The state superintendent of Texas recommends that provision be made that supervisors of the state department of education in visiting the different counties and districts of the state shall report to the state superintendent of public instruction as to whether the compulsoryattendance law is enforced, or not, and give to that officer power to require enforcement where this duty is neglected by local authorities.18 In the report of West Virginia, also, it is recommended that state oversight of local officials be provided. It is urged that the appointment of truant officers be made compulsory on boards of education, and that a state attendance officer be provided whose duty it would be to supervise attendance throughout the state.19

Ross, School Attendance in the United States, 1920,

<sup>&</sup>lt;sup>6</sup>Report of the Department of Public Instruction, September 30, 1921, p. 47. <sup>7</sup>Report of the State Superintendent, June 30, 1921,

p. 22.

Seport of the State Board of Education of the Public Schools of Maryland, July 31, 1922, p. 80.

Report of the State Board of Education of the Public Schools of Maryland, July 31, 1921, pp. 15, 16.

Public Schools of Maryland, July 31, 1921, pp. 15, 16.

Page of the Department of Education, 1917, Vol. 2, p. 144.

Page of the Department of Education, 1922, p. 156.

Page of the Department of Education, 1922, p. 156.

Page of the Department of Education, 1922, p. 156.

Page of the Commissioner of Education, 1920, p. 62.

<sup>&</sup>lt;sup>14</sup>Ibid, p. 91. <sup>15</sup>Report of the State Board of Education, New

 <sup>&</sup>lt;sup>15</sup>Report of the State Board of Education, New Hampshire, 1922, p. 105.
 <sup>16</sup>Blennial Report of the Superintendent of Public Instruction, 1917-18, p. 59.
 <sup>17</sup>Blennial Report of the Superintendent of Public Instruction, 1918-1920, pp. 10 and 11.
 <sup>18</sup>A Handbook of Information as to Education in Texas, 1918-1922, Bulletin 157, p. 74.
 <sup>19</sup>Report of the State Superintendent of Schools, June 30, 1924, p. 67.

p. 22.

Biennial Report of the Superintendent of Public Instruction, 1916-1918, Part I, p. 23.

Biennial Report of the Department of Education, Minnesota, 1919-20, p. 11.

Thirty-third Biennial Report, 1918-1920, p. 61.

Report of the Department of Public Instruction, September 30, 1922, p. 3.

<sup>57</sup> 

Among the needs of the county-school systems of Wisconsin is mentioned a more extended application of the compulsory-education law with adequate provisions for its enforcement.20 A state attendance department is held to be essential properly to administer the attendance law in Wisconsin.21 Such a department, however, would not relieve local authorities of their legal responsibilities. Even with such an organization, convictions under a criminal code would be difficult to obtain. The Georgia report states that the attendance law should be obeyed more fully than it is. In that state, 100,000 children are not even enrolled in school; 200,000 additional children are not in daily attendance. . . . The figures for white children alone show that 117,104 children on an average are out of school every day. The per cent for colored children is greater still.22

State surveys have found local enforcement inadequate. The Oklahoma survey commission recommends as follows: "As soon as the state and county departments are properly staffed, a division of school attendance should be established in the state department, which should work with and through the county departments of education.<sup>23</sup> The responsibility for the enforcement of the compulsory-education law should be assumed by this division."

#### Local Authorities Derelict

The Arkansas survey found local enforcement lacking: "Observation and data both indicate that the comparative indifference of the country people to the need of educating the children and laxness in the enforcement of the compulsory-attendance law are resulting in the continuance rather than in the eradication of illiteracy among rural people."

"In but one city visited was the compulsory school law strictly enforced. . . . Thousands of children are not attending school, first, because their parents do not realize the value and necessity for education, and, second, because the school authorities are derelict in the performance of their duty to enforce the law."24

The Alabama survey, finding a low rate of enrollment and irregular attendance, recommends that provision be made for a chief attendance officer as member of the state department of education.25

Local nonenforcement is discovered by the Ohio Survey: "The field study indicates (a) that truancy is very common in rural districts; (b) that many rural and village districts do not attempt to enforce the compulsory-attendance law; (c) that many districts are either hostile or indifferent to the enforcement of this law; (d) that many districts including some village districts employ no truant officers."26

The Kentucky survey states that the compulsory school law fixed age limits and a yearly minimum attendance requirement but made no provisions for enforcement through attendance officers: "School trustees were expected to enforce the law, which, of course, they seldom did

This survey, too, found weakness in the county and magisterial courts as enforcement agencies: "County judges and magistrates are so intimately connected with local affairs, and are under so many personal obligations that they cannot be relied on to prosecute their neighbors for failure to send their children to school."28

<sup>20</sup>Biennial Report of the State Department of Public Instruction, 1918-1920. p. 1.
 <sup>21</sup>Biennial Report, 1922-1924, p. 20.

The Virginia survey commission stated that the percentage of children who were attending school in Virginia with sufficient regularity to make real training possible was alarmingly small.29 It recommended that county school boards should be empowered to employ attendance officers.30

#### Elective Officers Inefficient

The South Dakota survey discovered difficulties of enforcement by local officials who held their positions by election. For the rural schools, the county superintendent was ex-officio truant officer. Enforcement of the law depended on the superintendent's initiative and fearlessness. The votes of the people were cast in the biennial elections for or against the county superintendent, which made enforcement a difficult matter to handle. Of the 64 superintendents, 35 reported the law well enforced; 5 reported that it was not enforced in their counties; and 24 declared that it was not as well enforced as it might be.31 The solution offered by the survey was a reorganization of the county system, whereby a county board of education would elect the county superintendent, so that he would be responsible to them and would have sufficient assistance to enforce compulsory attendance. In addition, state responsibility for the enforcement of attendance was to be assumed through the state department of public instruction which would work through the county boards of education.32

The explanation given in the Colorado survey for the very great difference between the number of days school is taught, and the actual attendance, is laxity in the enforcement of the attendance law:33

"School directors can scarcely be expected to encounter the danger of having trouble with their neighbors in an effort to force their chil-

<sup>29</sup>Virginia Survey, 1919, p. 23, <sup>30</sup>Ibid. p. 76, <sup>31</sup>South Dakota Survey, p. 41, <sup>32</sup>Ibid. p. 48, <sup>33</sup>Colorado Survey, p. 60,

THE TEACHER SPEAKS By a Milwaukee Schoolman

It is not ours to plan and build The edifices of steel and stone That stand, as if some god had willed, Great towers of Babel, vast and lone. Yet great as is the builder's art, Workers in steel and stone and sand, Ours is still the greater part; We build the future with our hand.

It is not ours to dream and mold The marble's hidden form and face, Like him (famed Phidias) of old, Who carved his dreams in chiseled grace. Yet great as is the sculptor's art, Craftsman in marble and granite white, Ours is still the greater part We mold destiny by our might.

It is not ours to grace the page With trenchant prose or faultless rhyme, A Shakespeare writing for the stage, A Milton's epic deep, sublime. great as is the author's art, Writer of wisdom's deathless scrolls, Ours is still the greater part; We write upon immortal souls.

It is not ours to wield the brush
That spreads the glowing colors' sheen,
A Turner painting morn's first blush, A Raphael at his saints serene. Yet great as is the painter's art, Workers on canvas with colors rife, Ours is still the nobler part We lend color to human life.

Oh, teacher mine, deem not our task consequentia A higher mission none could ask, A nobler mission ever know. Yes, great is the builder's and sculptor's art; Great the author's and painter's might; et ours is still the greatest part; 'Tis ours to guide the child aright.

dren to attend school regularly. Experience in this and other states indicates that when the authority is too localized the law is not apt to be enforced. . . . . A special questionary was sent to county superintendents requesting information regarding the enforcement of the compulsory-attendance law. Of 38 who replied to this inquiry, 20 (over 50 per cent) reported no enforcement or only partial enforcement of the law outside of first-class districts. . . . The enforcement should be in the hands of county truant officers instead of local district officers, and teachers should be required to notify the county superintendents of all unexplained continued absences."34

The staff in the Texas survey report unsatisfactory enforcement: "There is no doubt on the part of the survey staff that more adequate provision should be made to provide for compulsory attendance. In many communities a very full attendance is obtained, but there are others in which but little, if any, effort is made to secure the attendance of all who are of compulsory school age."35

A similar conclusion was reached in an investigation made by the children's bureau in cotton-growing areas of Texas. It quotes the state commissioner of labor as follows: "Our compulsory school-attendance law is very defective in many respects, and its enforcement in a majority of the counties of the state is never seriously attempted. The method provided for its enforcement is cumbersome and ineffective, and except in some of the larger cities of the state, it has had no appreciable effect in raising the percentage of attendance in schools of children within the compulsory age."36

In an investigation of juvenile delinquency in New York, the United States Children's Bureau concluded that the elimination of the justice of the peace as a judge and probation officer was needed.37 It gave also an explanation for nonenforcement of the attendance law by local officials: "Town school authorities are in general not inclined to enforce the truancy law, except when obliged to do so by the state education department. The explanation is simpleit is often neighborly feeling. Can a man who is a school trustee say to his friend and neighbor-'John, if you keep that boy of yours out of school another day, I'll have you before the justice of the peace (another mutual friend and neighbor) and have you fined ten dollars?' And then, even if this trustee does have the courage of his convictions, perhaps the justice of the peace will not have, and instead of roundly fining neighbor John will let him off with some good advice. Sometimes the trustees tell the teachers they must accept any excuse that the

children bring."38. Three Recommendations

The obvious conclusions from this inquiry

- (1) The enforcement of school-attendance laws when placed entirely in the hands of local officers is not successful.
- (2) The states which provide state attendance officials to bring charges in cases of nonattendance secure most improvements in the attendance of children on instruction.

(3) Courts other than, or in addition to. local justices of the peace should be designated by law as having authority in attendance cases.

If state legislatures mean that the attendance laws must be complied with, it is suggested that the passage of laws conforming to these conclusions will bring about great improvements in attendance.

<sup>&</sup>lt;sup>22</sup>Annual School Report, 1922, p. 17. <sup>23</sup>Bulletin, 1923, No. 14, U. S. Bureau of Education,

p. 67. <sup>28</sup>Bulletin, 1923, No. 10, U. S. Bureau of Education,

pp. 34. 42.

<sup>26</sup>Bulletin, Alabama Survey, p. 99.

<sup>26</sup>Ohio State School Survey, 1914, p. 262.

<sup>27</sup>Kentucky Survey, 1921, p. 91.

<sup>28</sup>Ibid. p. 92.

<sup>&</sup>lt;sup>34</sup>Ibid. p. 61.
<sup>85</sup>Texas Educational Survey Report, 1925, Vol. I. 322. 3°Children's Bureau, Publication No. 134, 1924, p. 21. 3°Children's Bureau. Publication No. 32, 1918, p. 9. 38Ibid. p. 38.

## Factors in Fixing Maximum Teachers' Salaries

(Concluded from October)

Eleven Salary Problems

Practically all present-day discussions of teachers' maximum salaries, whether in Revere or elsewhere, involve certain common considerations or questions which are more or less controversial. Among these are (1) the size of salaries or maximums for the elementary, junior - high - school, and senior - high - school groups, respectively; (2) salary differences as between men and women teachers (especially in the junior- and senior-high-school groups); (3) the length of service required for attaining the maximums; (4) the number of years of preparation; (5) professional training in service; (6) the value of the service of men and women; (7) the comparative importance and difficulty of service in the three divisions-elementary, junior high school, and senior high school; (8) supply and demand; (9) equal pay for equal work, (applying especially to juniorand senior-high-school groups), and (10) degree of permanency of service, i. e., the probable length of service of men and women. Another one which must be considered by the school committee and superintendent of schools is (11) the ability of the city to pay.

Let us examine the above considerations as affecting the general subject of maximums, with particular reference to the Revere problems.

- (1) The three salary levels. The weight of custom is overwhelmingly on the side of three levels of maximums for the elementary, juniorhigh-school, and senior-high-school groups. Justice and the welfare of the schools from an educational viewpoint bear evidence to support the theory of a single basic salary maximum for all teachers in all grades from the primary through the senior high school for those having the minimum educational and professional requirements now applying to the primary grades. The only justifiable difference in salary is the difference in number of years of training and in ability rather than because of membership in a particular teaching group. There appear to be no strong reasons even in New England for increasing the difference between the elementaryand senior-high-school maximums from the present \$300 to \$500 as proposed by the teachers' committee. Moreover there is no evidence for increasing the difference between the juniorhigh-school and the senior-high-school maximums from the present difference of \$200 to the recommended difference of \$300. There are but small differences between the duties, responsibilities, subject-matter content, teaching methods, problems of discipline, etc., of the sixth-grade teacher as compared with those of the seventh-grade teacher, although one is an elementary and the other a junior-high teacher. The same statement is true as between the ninth-year teacher (third-year junior high school) and the tenth-year teacher (first-year senior high school).
- (2) Salary differences between men and women will be considered under the head of equal pay.
- (3) Length of service preceding maximum salaries. Automatic annual increases of \$100 to the beginning salary until the maximum is reached is the usual custom. The principle of a graded schedule of salaries provides for the recognition of the value of continued service. The length of time required and the amount of the automatic annual increases are dependent upon each other. They vary, but do not affect the principle.

EDITOR'S NOTE: The present discussion of teachers' salaries is the conclusion of a study prepared by Mr. W. C. McGinnis, superintendent of schools at Revere, Mass. The first part of it appeared in the JOURNAL for October.

- (4) Point four was considered with point one. One of the stock arguments of the seniorhigh-teachers group for a higher maximum salary is the greater number of years of preparation of the first group. This suggestion loses much of its force when we consider the case of the junior-high-school teachers who teach college-preparatory and normal-school preparatory subjects and who are required to have the same number of years of preparation that the seniorhigh-school teachers have. The third year of junior high school differs not at all from the first year of senior high school, in any particular that requires less education, less professional training, and less ability in the teachers. To make the dividing line between the highest and next division of maximums correspond with the dividing line between the second and third junior-high-school years would tend to injure the morale and efficiency of the junior-highschool unit because of dissatisfaction among the
- (5) Professional training in service is always a part of merit systems of salary increases. Data available from the history of merit systems show that the disadvantages outweigh the advantages. Professional training under compulsion results in dissatisfaction on the part of the teachers. Professional-improvement courses are taken for the sake of financial benefit rather than because of a desire for additional professional power. Under a system of direct financial reward for taking professional courses, there is a tendency to select those courses which give the greatest number of credits toward the merit-increase requirements. The director of a New England summer school is authority for the statement that the teacher in the merit-increase system has a tendency to look for easy courses regardless of the bearing they have upon her work. That a merit system is not needed in Revere for the purpose of stimulating professional training in service is evident from data in the superintendent's reports, showing that more than 92 per cent of the present teaching force have taken professional courses while teaching in Revere. But professional improvement might well be recognized through a super-maximum.

(6) The comparative value of the services of men and women teachers is in controversy only as a result of applying custom, prejudice, and opinion, rather than reason to the solution of the problem. As a matter of fact, young inexperienced women teachers meet the tests of good teaching both in regard to methods and results better than do young inexperienced men teachers. This is not a matter of opinion; it is a matter of tested experience. There is no difference between the value of the service of experienced men and women teachers.

That "men are needed as teachers to overcome the danger of the feminization of the schools" is a familiar statement. Before the recent war the writings of several Americans on this subject were widely copied in England and the popular English conception of American boys and young men was that of undersized, mild-mannered, "effeminate" male individuals. When the first A. E. F. troops marched through the streets of London, the British lined up along the line of march looked in vain for signs of the bad influence of feminine teaching.

No Difference in Value

(7) Relative importance of three school levels. The relative importance of elementary-, junior-high-school, and senior-high-school teaching simply does not exist. All of the essential elements in any result are of equal importance.

To ask whether senior-high-school teaching is more important in preparing a boy for college than junior-high-school work is the same as to ask which factor is the more important in the problem  $2 \times 4 = 8$ .

(8) The law of supply and demand cannot be changed, but its forces can be regulated. There is a popular opinion that it is more difficult to find men teachers than women. As affecting Revere the forces of the law of supply and demand make no difference as between relative number of applicants for teaching positions. The number of male applicants during 1927 for junior- and senior-high-school positions represent a much higher per cent of the number of men teachers now in service than in the case of women applicants and women teachers.

(9) Equal pay for equal work has been considered, in part, above. This slogan doesn't always apply to specific cases. Regardless of whether coaching a football team is of equal, less, or greater importance, it is a fact that such teaching demands special skill, training, experience, and certain physical characteristics in the teacher of athletics which are not required of the other teachers.

(10) Permanence of service. The only data by which the relative degree of permanency of service, which is what is really meant by the vague term, length of service, are the data regarding the length of service of men and women teachers in the past, up to the present time. So closely related to the question of permanency of service and its relation to the new maximums recommended by the salary committee that it might be included in it, is the question of the ability of the city to retain men teachers under the present maximum. From data collected from several cities, which it is not necessary to quote in detail, it is found that a larger per cent of men entering the teaching profession remain ten or more years than is the case with women. Marriage of women teachers is the reason for this. From this fact many school authorities conclude that men teachers should receive higher salaries than women in like positions. The reasoning is faulty because of two very important things: (1) The data deal in per cents, not in the actual numbers of men and of women in the ten-or-more-years'-service groups. (2) The men are designated the longservice group and the women the short-service group without sufficient sifting of the data.

Examination of the data shows that the long service group is not made up of men, but is made up of both men and women, and the number of men in the group is less than the number of women. In Revere the number of elementary, junior-high-school and senior-high-school teachers who have served the city ten years or more is 104. This is the long-service group. Of this group 4 are men and 100 are women.

If permanency of service is to be a determining factor in adopting salary maximums, then, it is clear that an arbitrary exclusion of women from the long-service group is an error. Permanency of service is determined by the actual number of years of service, not by sex.

B. sed on the foregoing, Mr. McGinnis recommended the following revised scale of salaries:

#### The Recommendations

- (1) That first maximums be established for the classroom teachers as follows:
  - .......\$1,600 a) Elementary grades ... Junior-high-school grades ..... 1,700 6)
- Senior-high-school grades ... c) (2) That second maximums be established as follows:

Elementary grades .....\$1,800 (Concluded on Page 140)

## The Length of the Junior-High-School Day

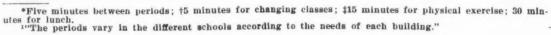
A study recently completed governing the length of the junior-high-school day gives the results of a survey of 81 cities of the country having a population of from 30,000 to 100,000. The study shows that the median length of the school day, exclusive of noon and recess periods, is 5 hours and 45 minutes, which is practically the same for the smaller cities as for the larger ones.

Of the 81 cities, 23 report that they give some time for recess. Ten of these cities are in Massachusetts. The median length of such time is about 20 minutes.

All but 9 of the 81 cities report that they give some time to the noon period. The median length of time for this period is one hour.

A total of 18 cities provide noon periods of 25 to 30 minutes, and 39 cities have periods of

	Length of Noon Periods in Minutes	Number of	Total Length of Recess Periods in Minutes	Time of Opening School	Time of Closing School
labama:	2	3	4		0.45
Montgomery	30-	2	20	8:45	2:15
Little Rock	30		• •	8:30	3:15
alifornia: Long Beach	60			8:30	3:30
Pasadena	30-35 40	4 5	20	8:00 8:30	2:55 3:10
San Jose	60	0	Ó	8:30	4
colorado:	70	0		8:30	3:45
Pueblo		0	• •	8:30	3:30
Meriden	95			8:20	3:30
Georgia: Savannah		1	15	9:00	2:20
llinois:					3:20
Aurora (West Side) Decatur		0	0	8:40 9:00	3:40
East St. Louis	40	0 2	10	9:00 9:00	3 :30 3 :50
Oak ParkQuiney	90	ō	0	8:40	3:30
Rockford				8:30 9:00	3 ;30 3 :00
ndiana:	-				4:15
Hammond	60 75	0	0	8:15 8:30	3:05
Kokomo	60	0	0	8:30 8:25	3 :45 3 :00
Terre Hauteowa:	75	*	• •		
Council Bluffs		• •	• •	8:45 8:45	3 :15 3 :00
Waterloo (East)		• •	• •	8:30	3:30
Yansas: Topeka	75	2	30	9:00	4:00
Louisiana:					2:30
Shreveport	. 30	• •	30	8:30	
Portland	1½ hours	1	20	8:30	3:30
Massachusetts: Brockton		1	15	8:00	1:00
Chelsea		${f 0}$	25	8:30	2:00 2:15
Everett	. 0	1	20	8:00	1:00
Fitchburg		1 2	25 15	8:15 8:45	2:15 3:30
Lynn	30	1	30	8:15	2:15 3:30
Malden	. 90	0	25	8:30 8:00	1:00
Quincy		1 2	20	8:15 8:30	1:30 1:45
Somerville	11/2 hours	ĩ	15	8:20	3:10
dichigan: Bay City	30	0	0	8:30	4:00
Flint	. 30	0	0	8:30	4:00
Hamtramek		·ė	·ė	8 :20 8 :30	3 :30 3 :40
Kalamazoo		• •	• •	8:00	3:30
Montana: Butte	. 25	0	0	8:30	2:30
Nebraska:	. 60	0	0	8:40	3:40
Lincoln New Jersey:		· ·	· ·		
New Brunswick			• •	8:40 8:30	2:30 3:00
New York:	. 60			9:00	4:00
Elmira Jamestown			• •	8:45	4:00
Mount Vernon Schenectady			•	8:45 9:00	3:15 4:15
Ohio:			••		
Canton Hamilton			• •	8:30 8:30	3 :30 2 :15
Lakewood	. 60		4 0	8:30 8:30	3:30
Lorain Springfield			• •	8:25	3 :45 3 :20
Oklahoma: Muskogee				9:00	3:30
Oklahoma City				9:00	3:45
Pennsylvania: Altoona	. 20			8:30	2:40
Chester	. 30			8:30	3:00
Erie Harrisburg		• •		8:30 8:45	2:30 3:30
Lancaster	. 90	• •		8:40 8:40	3:40 3:40
Norristown York	. 90		• •	8:30	4:00
Rhode Island: Pawtucket	. 30	1	5	8:30	3:00
Tennessee:					
Chattanooga		l activity period	d 40	8:30 8:20	3 :30 2 :45
Texas:	20			8:30	
Beaumont		i	is	8:30	3 :00 3 :30
Waco		0.0	• •	8:30	3:15
Utah: Ogden	. 60		• •	8:30	3:30
Virginia:				9:00	3:00
Petersburg West Virginia:					
Charleston		I	Brief rest periods	8:30 8:30	3 :30 3 :30
Wisconsin:	00	•			
Green Bay Kenosha		• •		8:15 8:40	3:45 4:00
Madison <sup>1</sup>	* ***		•		****
Oshkosh	120 90	2	25	8:30 8:45	3:30 4:00





LULA LEIGH PICKETT, Superintendent of Schools, Superior, Wis.

60 minutes or more. In 5 cities, the recess periods are from 25 to 35 minutes, and in one city they are 40 minutes in length. Six cities report recess periods of less than 20 minutes.

#### THE CONTROL OF SCHOOL ENTERTAIN-MENTS IN SIOUX CITY

—Criticisms are frequently directed to the superintendent's office complaining about the number of entertainments which are given in some of the schools. The criticism is often made by teachers that entertainments conflict with the regular work of the school, with the result that teachers and departments find their work set aside for rehearsals or various sorts of preparation.

In Sioux City, Iowa, under the direction of Supt. M. G. Clark, an effort has been made to standardize the number of entertainments that may be given in junior and senior high schools, and to standardize the dates on which they are given in such a way that they will be evenly distributed through the year, without bringing any unnecessary burden at any particular time. It is planned to adopt the same plan in the grade schools in order that the number of entertainments may be kept within certain limits.

It is pointed out that in the elementary schools and junior high schools, entertainments should be given from the regular material of schoolwork. Singing, speaking, and dramatization make up a part of the regular work and may well be used for school entertainments. Meetings of the parent-teacher associations should be regarded as an opportunity to bring parents into contact with the regular work.

Special entertainments given for moneymaking or other purposes should be limited to not more than one in each semester in elementary schools, and two in the junior and senior high schools. Holiday programs, special-occasion programs, and others of a like nature are a part of the schoolwork and do not fall into the money-making group.

Under the regulations, no child may be asked to take part in more than one program during the half-year, and the student body should be so studied that each child is given an opportunity to appear at some time during the year.

In working out special money-making entertainments of any kind, principals are asked to guard against undue interference with the regular schoolwork. The matter of school entertainments should be so controlled that they become a means whereby the schools may legitimately keep in touch with the public.

In each case, principals are asked to arrange the entertainments to be given in their build-(Concluded on Page 142)

## Making a High-School Schedule

H. B. Weaver, Principal of the High School, New Kensington, Pa.

One of the most important duties of a highschool principal is the making of the schedule of recitations and the assignment of pupils to the classes. Class schedules must vary on account of local school conditions. However, the making of the schedule is no small problem and the proper arrangement of classes is worthy of most careful consideration. The assignment of pupils to classes is again a problem that takes considerable time and care. No principal should attempt to open school without having arranged the schedule of recitations and having made proper provision for assigning the pupils to classes.

The numerical method as outlined here has been used in schools with enrollments varying from 500 to 1,000 pupils. About six weeks before the end of the semester, registration blanks are distributed to pupils enrolled in the high school and all pupils in the eighth grade ready for promotion. Previously, at a special teachers' meeting the method of registration is explained to all section-room teachers. various courses of study are explained with detailed statements regarding the subjects offered regularly, as well as the electives. During one of the regular room-assembly periods the registration blanks are distributed to the pupils by the section-room teachers. The pupils are allowed to keep these blanks for approximately one week, when all must be returned to the section-room teacher for approval. On this blank the pupil fills in the subject and the year. The following will serve as an example of the blank generally used:

RESPONDENT BLANK

Hame (Last name first) SUBJECTS Laboratory Periodes

Return this Form to the Assembly-Room Teacher before May let

The Above Schedule is Approved by Assembly-Room Teacher

After the registration sheets have been approved by the section-room teachers, they are sent to the office of the principal. Here all blanks are assembled by classes and the students' selection of subjects is summarized. This summary now shows the exact number of pupils for all subjects for the next semester. From this information the exact number of classes may be determined.

Since the exact number of classes is known, the number of teachers for the school may be determined by dividing the total number of classes by the average number of classes taught by the teachers. If the summary of students' selections of subjects requires the distribution into 150 different classes and every instructor teaches five periods per day, thirty teachers will

The next step is the actual making of the class schedule. Perhaps the most satisfactory method is the use of a regular size of drawing board with a sheet of drawing paper attached and marked off horizontally into as many spaces as there will be class periods during the day and vertically into as many spaces as the number of teachers determined upon for the school. After the lines have been drawn, enter in every

block or square, numbers as given in the illustration below, beginning with the first column: 11, 12, 13, 14, 15, 16, 17; second column, 21, 22, 23, 24, 25, 26, 27; third column, 31, 32, 33, 34, 35, 36, 37; fourth column, 41, 42, 43, 44, 45, 46, 47, etc.

SCHEDULE OF RECITATIONS

PERIOD .	Miss Brown	Frost	Miss Howe	Miss Frech	Mi sa Hawk
First	Eng I	Eng VI	S.H. 31	Eng IV	Lang II 101
Second	3.H. 12	Eng II	Eng I 32	Eng IV	Lang II
Third	Eng I	Eng II	Eng I	Eng IV	s.H. 103
Fourth	Eng III	Eng II	Eng I	3.H.	Lang 11 104
Fifth	Eng III	Eng II 25	Eng I	Eng VII	Lang III
Sixth	3.H. 16	5.H. 26	Eng I 36	Eng VII	3.H. 106
Seventh	Eng III	S.H. 27	3.H. 37	S.H.	Lang III

Note: The above is part of a high-school schedule, does not show all of the regularly scheduled English asses and but one of the language classes. "S. H." an abbreviation used for study hall.

The various subjects are now assigned to the teachers, and the teacher's name placed at the head of the column. This can be done either by writing the names of the subjects in the squares or by writing them on small, cut squares of paper and then attaching them by means of thumb-tacks in the proper space or period. The latter method seems to be the more practical, as it enables one to make the frequently necessary changes on account of conflicts, without erasures. In assigning the class subjects there will be less conflicts if the senior-class subjects, or those subjects in which there is but one class, are assigned first.

The class schedule being completed, the work of assigning the pupils to classes is now begun. After the registration blanks have been properly sorted there will be combinations of subject selections by the pupils in all classes that can be assigned to one group. For example, there may be in the freshman class 60 registrations for the commercial course, with French I as an elective. Two groups of this number may



ROY P. WISEHART, State Superintendent of Schools, Indianapolis, Ind.

Mr. Roy P. Wisehart, on September 2, was appointed state superintendent of schools of Indiana, to succeed Mr. Charles Miller.

Charles Miller.

Mr. Wisehart is a native of Indiana and was graduated from Indiana University in 1910. Following his graduation, the taught for three years in the rural schools and later became assistant principal in the Morristown High School, and in 1915 was made principal of the Pendleton High and in 1915 was made principal of the Union and in 1915 was made principal of the Pendleton High School. In 1919 he was appointed principal of the Union City High School and in the following January, became superintendent of the school system, succeeding O. H. Greist.

Mr. Wisehart holds a master of arts degree given by Teachers College, Columbia University, for professional work taken in summer courses from 1923 to 1926. He also completed a summer course at the University of Wisconsin.

be made and assigned as a solid block for the entire day. This means that a group will travel together the entire day in classes and study halls. Suppose they are assigned to the following classes and study halls: French I, class 154; English I, class 13; Vocational Civies, class 517; Business Training, class 406; study halls 31, 12, and 45. Thirty pupils have now been assigned to the above classes and study halls. Interpreted, the above pupil's schedule of daily recitations would read as follows:

Reading from the first period to the last it will be noted that all study halls and classes are numbered according to the class period. The last digit of each of the numbers indicates the class period and the first number, or numbers, indicates the teacher and subject. Thus, class 154 recites the fourth period and is taught by teacher 15. A very practical method for using the class numbers is to number all English classes from 11 to 100; modern language and Latin classes from 101 to 200; mathematics classes from 201 to 300; science classes from 301 to 400; commercial classes from 401 to 500; social-science or history classes from 501 to 600, and all vocational subjects from 601 to 700. The reader will then realize that class 154 is numbered in the language series and is, therefore, a class in one of the languages. The person assigning the pupils to classes can readily determine whether he has assigned the pupil for every period in the day, by counting through the class and study-hall numbers. If the last digits of the study-hall and class numbers include all numbers from one to seven, the schedule of class recitations is complete and there are no conflicts.

If pupils are grouped according to intelligence ratings, the assignments to classes may be made in the same manner as the above described cases. There will be, of course, a number of irregulars, or students who are pursuing odd combinations of subjects. All such cases must be scheduled individually. After all the pupils have been scheduled, the blanks are turned over to a clerk for copying class and study-hall rolls so that each teacher may be furnished with a complete roster of pupils to appear in the classes and study halls.

After the class schedule of recitations has been completed and the pupils have been assigned to classes, the classroom schedule sheet is made from the class schedule. The various classes are assigned to rooms according to the adaptability of the room to the special type of work and the size of the class. After these assignments have been made, the classes for all the rooms are listed in the following manner:

CLASSROOM SCHEDULE Classes 231, 232, 233, 314, 417, 515, 516 17, 104, 105, 106, 213, 311, 312 11, 12, 13, 14, 15, 16, 217 101, 102, 103, 404, 407, 605, 606 Room Number 105 106 107

Every teacher is supplied with a copy of the schedule and a copy is posted on all bulletin boards. By means of the classroom schedule the pupils are able to find the classrooms for the various assignments.

On the opening day of school the original registration blank is returned to the pupil with the class and study-hall-number assignments marked in the class-number column. As soon as the pupil receives this sheet, he has full instructions for his work during the semester. If he desires to make any change in the subjects assigned or the periods assigned for the classes, he must go to the principal's office and there present the original registration blank before any change can be made. In the writer's experience not more than five per cent of the

(Concluded on Page 142)

## School Finances in a Small Ohio City

R. A. Walls, Superintendent of Schools, Kent, Ohio

Under a new law passed in Ohio at the 1925 session of the legislature and amended at the 1927 session, all boards of education are required to set up a school budget, by items, in asking for funds.

This budget is reported to the county budget commission, composed of the county auditor, county treasurer, and prosecuting attorney. As the law works out, the county auditor in most counties is the budget commission. The budget commission certifies back to the city board of education the amount of money to be received.

Under the new law in Ohio the successive steps in budget making are as follows:

1. Before July 15 of any year the local board of education must adopt a budget for the succeeding calendar year under three heads:

a) General Fund-operating expenses, including capital outlay.

b) Sinking Fund-meeting payments on bonds and interest on same.

c) Teachers' Retirement Fund-state requirement.

2. Two copies of this budget must be on file in the office of the board of education not less than ten days before its final adoption by the board.

3. A public hearing must be held on the budget, of which public notice must be given in one publication ten days before the meeting for its final adoption. The budget in its final form must be submitted to the county auditor on or before July 20, or at such later date as the tax commission of Ohio may prescribe.

4. The county budget commission must receive the budget from the county auditor and pass same as promptly as possible. The county budget commission then certifies back to the local authorities the necessary tax rates for the ensuing year which must be adopted by local authorities. The county budget commission is responsible for seeing that all levies are in accordance with the state law.

5. The county budget commission then sends to the local boards the "official certificate of estimated resources,"

6. The local authorities then revise the budget, if necessary, so that all expenditures come within the estimated resources.

7. Any local board dissatisfied with the action of the county budget commission may appeal to the state tax commission for relief.

8. About the first of January the local board of education must pass a temporary annual appropriation measure based on the revised tax budget.

9. After the first settlement with the county treasurer about March 1, and before April 1, the annual appropriation must be passed, based on actual receipts. (Due to nonpayment of taxes, there is sometimes a large discrepancy between the estimated resources and the actual income. At the last settlement in August with the Kent board there was a \$5,000 shortage in settlement involving approximately \$80,000.)

10. After the final settlement with the county treasurer in August of each year, an appropriation resolution is passed in accordance with actual receipts for the year. Expenditures cannot be made beyond the actual receipts in any fund. Within the subdivisions of the general fund the local board may transfer funds as it sees fit and report same to county auditor. Funds for teacher-retirement payments and sinking funds cannot be so transferred.

The budget filed with the county budget commission has expenditures listed under the following heads:

Administration-Personal Services Permanent Improvements

Other Expense Instruction

Personal Services Other Expense Coordinate Activities Personal Services

Other Expense School Libraries-Personal Services

Other Expense Transportation of Pupils-Personal Services Other Expense

Public Lunches-Personal Services Permanent Improvements

Other Expense Community Centers Personal Services Permanent Improvements

Other Expense Playgrounds Personal Services Permanent Improvements Other Expense

\*Unpaid as of December 31, 1926.

School Gardens-

Personal Services Permanent Improvements Other Expense

Other Auxiliary Agencies— Personal Services Permanent Improvements Other Expense

Operation of School Plant-Personal Services Other Expense

Maintenance of School Plant-Personal Services Permanent Improvements Other Expense

Contingent Expense

Capital Outlay-Purchase of Land

Improvement of Sites New Equipment for Old Buildings

Sinking Fund-Redemption of Term Bonds Interest

The state auditor prescribes the form in which expenditures must be classified, and the appropriation ledger must be opened under the same headings.

(Continued on Page 142)

KENT PUBLIC SCHOOLS Annual Appropriation Resolution Adopted September 2, 1927 (Fire insurance included) GENERAL FUND

GENERAI	FUND		
Purpose A-PERSONAL SERVICE-		Amount Appropriated	
A- 2 Clerk A- 8 Superintendent A- 9 Superintendent's Clerk, and Extra Office Help A-11 School Census. A-15 Supervisors—Day Schools. A-21 Principals A-27 Teachers A-29 Evening Schools.	Budget \$ 960.00 4.250.00 1.900.00 150.00 3.700.00 8.150.00 58,500.00 700.00	to Date 600.00 2,816.68 1,206.18 110.00 2,081.00 4,740.00 33,538.32 314.00	Balance \$ 360.00 1,433.32 693.82 40.00 1,619.00 3,410.00 24,961.68 386.00
Totals Coordinate Activities— A-30 Compulsory Attendance	\$ 78,310.00	\$ 45,406.18	\$ 32,903.82
A-33 Nurse	1,400.00	810.00	590.00
Totals	\$ 1,400.00	\$ 810.00	\$ 590.00
A-37 Cafeteria	$\frac{425.00}{150.00}$	$208.13 \\ 88.50$	216.87 61.50
Totals Operation of School Plant—	\$ 575.00	\$ 296.63	\$ 278.37
A-42 Janitors	8.700.00 $1,950.00$	5.196.50 $1.139.50$	$3,503.50 \\ 810.50$
Totals	\$ 10,650.00	\$ 6,336.00	\$ 4,314.00
GRAND TOTAL PERSONAL SERVICE	\$ 90,935.00	\$ 52,848.81	\$ 38,086.19
B- 1 Administration Office B- 3 Superintendent's Automobile B- 4 Textbooks (\$27.43)* B- 5 Library Books (\$55.00)† B- 6 Educational Supplies.	1,200.00 $360.00$ $3,027.43$ $465.00$ $4,311.24$	$\substack{1,097.01\\240.00\\2,602.12\\343.59}$	$\begin{array}{c} 102.99 \\ 120.00 \\ 425.31 \\ 121.41 \end{array}$
(\$91.24),* (\$20.00)*  B- 8 Gas  B- 9 Fuel  B-10 Janitors' Supplies (\$43.95)*  B-11 Engineers' Supplies  B-12 Recreational Supplies  B-13 Other Supplies  B-13a Cafeteria Supplies (\$15.00)*	200,00 4,400,00 1,643,95 100,00 450,00 300,00 1,590,00	3,310,21 124,03 1,329,54 1,497,52 14,50 51,00 95,40 918,78	1,001.03 75.97 3,070.46 146.43 85.50 399.00 204.60 671.22
GRAND TOTAL SUPPLIESC-MATERIALS FOR MAINTENANCE-	\$ 18,047.62	\$ 11,623.70	\$ 6,423.92
C- 1 Building and Grounds. C- 2 Equipment and Furniture C- 4 Other Motor Vehicles (\$1.05)* GRAND TOTAL MATERIALS FOR MAINTENANCE. D-EQUIPMENT REPLACEMENTS—	$\substack{1,104.24\\250.00\\151.05}$	838.11 180.07 67.39	266.13 69.93 83.66
MATERIALS FOR MAINTENANCE D-EQUIPMENT REPLACEMENTS-	\$ 1,505.29	\$ 1,085.57	\$ 419.72
D- 1 Administration Office D- 4 Educational (\$32.50),* (\$612.00)† D- 5 Recreational GRAND TOTAL EQUIPMENT REPLACEMENTS	$\begin{array}{c} 200.00 \\ 1,094.50 \\ 350.00 \end{array}$	8.50 801.15 102.05	191.50 293.35 247.95
E-CONTRACT AND OPEN-ORDER SERVICE-	\$ 1,644.50	\$ 911.70	\$ 732.80
E- 2 School-Building Repairs (\$137.50),* (3,241.40)† E- 9 Water E-10 Electricity E-11 Telephone E-15 Service Fund E-17 Advertising E-18 Hauling	$\begin{array}{c} 13,078.70 \\ 260,00 \\ 3,200.00 \\ 675.00 \\ 75.00 \\ 100.00 \\ 350.00 \end{array}$	$\begin{array}{c} \textbf{11,990.01} \\ \textbf{47.21} \\ \textbf{2.662.72} \\ \textbf{368.02} \\ \textbf{75.00} \\ \textbf{17.29} \\ \textbf{179.91} \end{array}$	1,088.69 212.79 537.28 306.98 82.71 170.09
GRAND TOTAL CONTRACT AND OPEN ORDER	\$ 17,738.70	\$ 15,340.16	\$ 2,398.54
F-FIXED CHARGES AND CONTRIBUTIONS— F- 3 Insurance F- 5 Teachers' Retirement	1,000.00 2,800.00	$210.91 \\ 2,357.11$	789.09 442.89
AND CONTRIBUTIONSG—CONTINGENT FUNDH—DEBT SERVICE—	\$ 3,800.00	\$ 2,568.02	\$ 1,231.98
H-1 Bonds Maturing	12,351.50 29,518.48 75.00	2.351.50 13,247.68 61.49	10,000.00 16,270.80 13.51
GRAND TOTAL DEBT SERVICEI—CAPITAL OUTLAY—	\$ 41,944.98	\$ 15,660.67	\$ 26,284.31
I-1 Purchase of Lands	1,000,00 2,500,00 2,500,00	514.60 $1,704.22$ $2,282.05$	485.40 795.78 217.95
GRAND TOTAL CAPITAL OUTLAY	\$ 6,000.00	\$ 4,500.87	\$ 1,499.13
GRAND TOTAL	\$181,616.09	\$104,539.50	\$ 77,076.59

## A Superintendent's Letters

## One of a Series of Monthly Letters to the Teachers, Principals, and School Officials of a Small City

This letter, which deals with complaints and grievances of janitors, is typical of the letters which have been sent out to the school employees by this energetic superintendent. It had for its purpose the smoothing out of a few rough spots in the school system and the making of a better janitor system which would be well above the average. The letter reads as follows: TO THE PRINCIPALS AND JANITORS:

At a recent meeting of the janitors, school committee, and superintendent of schools, it developed that there is a feeling on the part of some of the janitors that they are handicapped by "too many bosses." Some of them have stated that they receive orders from the school committee, the superintendent of schools, the supervising janitor, the principal, and the head janitor of a building.

In my opinion, based on an extensive and detailed investigation of the present practice of the administration of the janitorial systems in 294 cities and towns, our janitorial system is administered according to the best standard of present-day practice, and that the results, as measured by the quality of service rendered by the janitors, the general cooperation, and the small amount of friction, are very much superior to the results obtained in the average town and city. In fact, these conclusions do not depend upon opinion for proof of their correctness. Our janitor service, when measured by an expert disinterested outside committee, has been rated "excellent."

In order that the slight misunderstanding existing at the present time may be cleared up I will give some facts and principles which are in accordance with the best accepted standards of administration of the janitorial system of any city and which apply to our system.

The school committee is a legislative body in the administration of any part of the school system. The school committee issues no orders except through the office of the superintendent of schools. Even orders to the supervising janitor and principals are issued through the superintendent's office.

The superintendent gives no general orders to the janitors except through the supervising janitor and principals. The principals give no

general orders to janitors, except through the head janitor of a building, and all such general orders conform to the school committee rules and regulations.

There is practically no conflict of authority. except where janitors look for it and sometimes see shadows where there is no substance. The school principal is the supreme authority in his or her building, and as such has a right at any time to make requests and suggestions, and to issue orders which are not in conflict with established policies of the school committee. The principal does not issue general orders except through the head janitor, but the principal is acting entirely within his rights when he requests an assistant janitor to perform some duty which needs immediate attention. The principal is vested with authority to determine what constitutes immediate needs, and janitors, or assistant janitors are required to abide by the principal's request or order. An aggrieved janitor, or assistant may appeal to the supervising janitor, superintendent, and school committee in the order named when he has an objection to the requests of the principal, but to refuse or neglect to act in accordance with the request or orders of the principal constitutes insubordination.

One of the most important principles of school administration is that the school principal is the supreme administrative authority of a school building. This principle applies not only to the relation of the principal to the janitor, but to teachers and pupils also.

All complaints and grievances of janitors will receive courteous attention and careful consideration, and janitors will receive uo injustice. It should be clearly understood that janitors are expected to make suggestions for the good of the service in their department; that they may appeal from decisions which they consider unfair to them; and that they may do each of these things without fear of hurting their standing. On the other hand, all janitors must understand that insubordination, such as refusing to carry out the orders of principals, will not be tolerated but will result in the application of the measures provided for such cases in the rules and regulations of the school committee.

shelf in one corner of the room, or decorate a yard of burlap with pictures, newspaper clippings, and notices, but ordinarily no conveniences invite such interesting activities as the voluntary association of children and books. The genius of modern school architecture is, however, interpreting such educational possibilities into structural plans.

The upper portion of this case contains a magazine section where copies of such magazines as Child Life, Youth's Companion, American Boy, American Girl, Nature Magazine, and other children's periodicals cultivate lasting acquaintances. At one side of the magazines are open book shelves where the best of children's books are casually exposed to youthful quests for interesting and instructive reading.



READING CASE, LINCOLN CONSOLIDATED SCHOOL, YPSILANTI, MICH.

Such a case may accomplish abundant service in every classroom. The alert child finds in it satisfaction for otherwise leisure time, while the child, the literary excellence of whose impoverished home is measured by the "tabloid." sooner or later discovers the lasting and enduring values in worth-while books. In the upper grades and high school, informational reading correlates classwork outside of school life. The class in agriculture is stimulated by the latest magazine in fruit raising; the physics class has a paper like the Scientific American within easy reach, and groups in social science broaden their horizon with appropriate popular periodicals. From these new windows, the child views the broadening landscape of human endeavor, he discovers sources of information and interest heretofore unknown.

One of the main aims of education is to lead a child to develop an appetite for the right thing, and appetites for right things are caught rather than taught. The reading case aims in a "wireless way" to help the teacher and the school in encouraging boys and girls to select and read worth-while books and to cultivate an intimate acquaintance with the best of current reading.

Above the open book shelves and magazine section is a bulletin board for posting newspaper clippings, post cards, notices, etc., that are of current interest. Both individuals as well as groups of children feel a peculiar interest in their work when they are permitted to share in contributing to the bulletin board space.

The lower half of this useful case serves a very valuable duty in providing drawers for (Concluded on Page 144)

## Classroom Refinements

Arthur R. Shigley, Architect, Lansing, Mich.

Beauty of architecture and size of school buildings will, doubtless, continue to be the first to arrest the eye and to catch the applause of the many admirers of our outstanding public-school structures. The most recent development of school planning, however, has been directed towards interior development—class-room conveniences and classroom adaptation to fit the definite needs of various types of classes. In the next decade the most noteworthy progress in school planning will be centered about classroom activities of boys and girls.

Typical of this trend in school conveniences, the accompanying illustrations suggests the close correlation of children's reading to building plans. Built in the classroom, just as much a part of the school structure as a window or a blackboard, the reading case illustrated is designed to connect books, magazines, and pictures in an easy and natural way with the class activities of boys and girls. The physical equipment of libraries has been well provided but in the schoolroom where the child sits, where he works, and where he forms his closest associations, ordi-

narily only awkward afterthoughts contribute their miserly share of lost opportunities. Occasionally a resourceful teacher will improvise a reading table, inveigle the janitor to nail a



GENERAL VIEW OF THE BOOKSHELVES AND CASES FOR TEACHING MATERIALS IN THE LINCOLN CONSOLIDATED SCHOOL, YPSILANTI, MICH.



# School Board Journal

WM. GEO. BRUCE WM. C. BRUCE

**EDITORS** 

#### EDITORIAL

## LOYALTY OF SCHOOL PRINCIPALS TO THEIR SUPERINTENDENT

The educator who comes into a community as a new man to assume the duties of superintendent of schools is not only concerned about the backing he receives from the board of education, but he is equally concerned as to the loyalty and cooperation of principals and teachers. He may discover here and there among the principals an unfriendly eye, due to the fact that his entrance upon the scene has wrecked the ambitions of one or more local aspirants.

At Indianapolis, Indiana, a new school superintendent has been chosen. Charles F. Miller, former state superintendent of Indiana, is the man. Originally he came from some smaller inland town. His prestige as state superintendent, together with his general reputation as an educational leader, led to his selection for the Indianapolis post.

A member of the board of education, Charles W. Kern, believes to have discovered the fact that Superintendent Miller is not receiving the cooperation to which he is entitled. He announced that "if the superintendent of schools and the members of the board are not given prompt assurance of cooperation and loyalty from the members of the educational department (assistants and principals), there should be some resignations."

The situation at Indianapolis calls to mind an incident told by the late Dr. William T. Harris, for many years United States Commissioner of Education, which occurred while he served as superintendent of the schools of St. Louis, Missouri. Shortly after entering upon the duties of his office in that city, he discovered that six of the local school principals were not entirely loyal to him. They were inclined to disapprove of his appointment as the head of the St. Louis school system.

"The discovery had a disturbing effect upon me," Dr. Harris told the writer. "Even more distressing was the fact that these six school principals were among the most prominent and ablest in the school system. My first impulse was to urge their dismissal. I must command the absolute loyalty of those who were to serve under my direction. But, I began to reflect. In dealing with the question of loyalty several queries arose in my mind. One was whether these principals were loyal to the schools as a whole? The other was whether they were loyal to the immediate task entrusted to them? And if so, why bother about personal loyalty? Surely, they lacked confidence in my ability. Perhaps, it was up to me to demonstrate my fitness for the office of superintendent. They enjoyed good records as principals. My record as superintendent was still in the making. Perhaps they extended all the loyalty for the time being to which I was entitled."

This was the simple reasoning of a school superintendent who became one of America's

greatest educators. In less than a year's time, so the story goes, Dr. Harris had won the personal loyalty of every principal in the St. Louis school system.

A school superintendent, in order to be successful, must have the loyal cooperation of his assistants, his principals, and the rank and file of the teachers. His office is entitled to that cooperation. The cause of education demands it; professional honor compels it. But, he can strengthen that cooperation materially by demonstrating his character and ability and proving his fitness for educational leadership.

Where the school personnel is imbued with the proper professional spirit, it becomes unnecessary on the part of the board of education or anyone else to threaten retaliatory or punitive measures.

## SCHOOL ELECTION CAMPAIGNS AND THEIR VALUE

The school-board elections as exemplified in the average American city are usually a quiet and somewhat dignified affair. The candidates, as a rule, are not particularly zealous in mustering votes. Frequently it is deemed necessary for civic organizations to stimulate enough interest to secure a reasonably complete expression at the ballot box.

Sometimes a school-board candidate steps before the public with an issue. He either wants or does not want a new school building, or he is antagonistic to something the incumbent board has done, or in protest of something that the board has failed to do. At any rate, it is not difficult to find an issue even if it be a most flimsy one.

In Cleveland, Ohio, a 27-year-old attorney, named Ernest J. Bohn, recently announced his candidacy for a membership in the local board of education. In hoisting his campaign banner he hurled the following indictment against the present administration:

"School officials would have no need for a new \$3,000,000 headquarters if superfluous bureau heads and supervisors were fired to make room for necessary personnel. Imported executives get the best headquarter jobs at high salaries to the exclusion of teachers who are willing to work for less. Thousands of dollars are wasted on needless charm courses designed to give pupils 'It.' I propose to modify the curriculum to the necessary three R's. Population of the school district increased 30 per cent in 11 years. School costs increased 400 per cent in the same period. A higher character of education can be furnished for less money."

The young aspirant to school-board honors succeeded in getting the local press to notice his platform, and to prompt President E. M. Williams of the Cleveland board of education to make reply to the charges preferred. The latter said: "I want to be shown where a saving can be made. If our critic would name superfluous headquarters employees who should be dismissed we should be glad to consider them. He has failed to cite actual cases of unwise expenditures during the 11-year period referred to.

"For many years board members have been drafted and in no sense have campaigned for the position," he asserted. "Voters will question why Bohn, undrafted, seeks to play the role of a Moses in leading the board out of its so-called extravagance. And who besides Bohn thinks such extravagance exists, anyway?"

Cases of this kind are somewhat singular, but wherever they have come to the surface in the past, they have resulted in a little hubub and nothing more. In other words, radical reforms as applied to the administration of the schools, and shouted from the housetops, are neither applicable, timely, or expedient, and those who voice them usually go into oblivion as rapidly as they have risen into prominence.

The humor of the situation comes to a climax when one of the reformers is actually elected to board-of-education service. It is then that he begins to learn that a modern school system is a structure which was not created in a day. He also learns that it took many years and many minds to rear the administrative machinery of a school system to a high order of efficiency, and that radical changes or reforms are impossible

The school system of Cleveland has stood the test of service. It is manned by the ablest educators in the land, whose prestige, character, and ability rank with the very highest. No one with even a cursory knowledge of Cleveland's school system would for one moment question either the efficiency or the integrity of those who direct the educational destinies of that progressive American city, or to doubt the achievement by that city made in the cause of education.

## THE AUTHORITY OF SCHOOL BOARDS AND THE RIGHTS OF TEACHERS

The famous pupil strike at Superior, Wisconsin, has not only prompted discussions as to the matter of discipline to be exerted by school authorities in averting such strikes, but has also directed attention to some of the causes which lead to them. As far as the student body is concerned, it is clear that it has no right to engage in strikes and noisy demonstrations in order to record its protest against an action of the school authorities. Such conduct undermines the very fundamentals upon which stable government rests. Children cannot be allowed to usurp the function of those entrusted with the government of the schools.

But, let us proceed for a moment to consider the causes which bring about a state of protest and disorder. The board of education, upon the recommendation of the superintendent, has the right to employ or dismiss teachers. That right is not disputed. Thus, the teaching service is attended with a percentage of turnover which is constant and a fixed part of school-administrative routine. Teachers come and go, and the general public is little concerned as to the changes that are from time to time effected.

The exceptional case, however, is bound to arise. A teacher who has been dropped for the good of the service resents the action. She does not want to be deprived of the means of a livelihood, or incur the loss of prestige implied in a dismissal. A protest follows, and the friends of the aggrieved array themselves against the offending school authorities. A public hearing is usually demanded, to be followed by reinstatement.

The issue finally centers upon the question of granting a public or private hearing. Such hearings may not always be either wise or expedient in the interest of the school system as a whole, but the fact remains that the aggrieved party is entitled to a full presentation of all the facts and to a decision based upon truth and justice. A public hearing may be denied if the charges involve questions of moral turpitude, but a private hearing, if demanded, cannot well be denied.

When and where are private hearings warranted? When the complaint involves a case of morality, likely to develop scandal, all investigations should and must be held behind closed doors. The exposure of scandal which has a tendency to lower the moral tone of the community must be avoided. And every wise school board does avoid such an outcome.

Private hearings are permissible, too, where the temperamental fitness and professional attainments of the dismissed are brought under scrutiny. A teacher who is deemed impossible in one community may still have a prospect of a useful career in another community. A dismissal may have caused a wholesome awakening and prompted the dismissed to profit by an inflicted rebuke.

Teachers have not always been judicious in seeking redress in cases of dismissal. Nor have the friends of teachers always sought the facts before they have engaged in public protestation. Some of the cases of the past year, which have been loudly exploited in the public press, have proved disastrous to the contestants. A loss of professional prestige and public humiliation has followed in most cases. Vindication and reinstatement have rarely followed.

So much for the professional worker's or individual side of the case. As far as boards of education are concerned, a broader viewpoint must be adopted. Such bodies are not only concerned with the professional prestige of the classroom worker but are more particularly concerned with the welfare of the school system as a whole. Just as teachers are chosen with thoughtful care on the basis of character and capability, so all dismissals must be engaged in in the light of the school service, with equal caution.

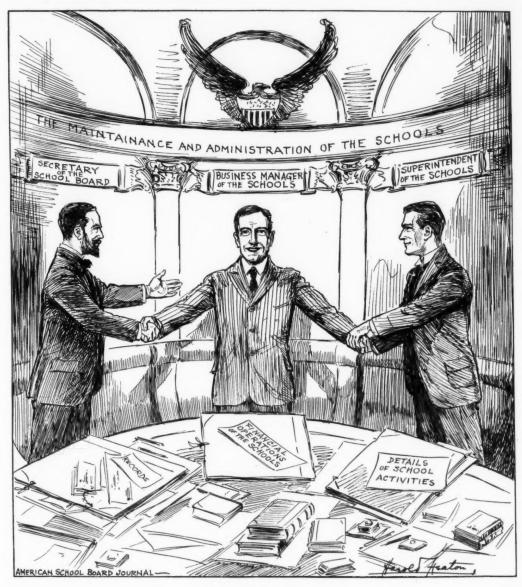
It is primarily incumbent upon the administration that controls the schools to set an example in practices that not only make for efficiency but that hold to the highest tenets of justice and fairness. If a teacher who has been dismissed feels that an injustice has been done, it behoves the authorities to institute such an investigation as will lead to just conclusions. The board of education must be satisfied that any dismissal engaged in will bear the light of day and the rules of fair play.

The teacher has rights which the school board must respect, and in no instance can these rights be either violated or ignored. On the other hand, the school board has responsibilities which the teacher must recognize. And finally the public has the right to exact at the hands of both school boards and teachers, an efficient administration of the school system, but it also has the right to demand an explanation when things seem to have gone wrong. That explanation, when demanded, cannot ordinarily be denied. Justice and equity must prevail.

## THE ADMINISTRATIVE MACHINERY OF CITY-SCHOOL SYSTEMS

In view of the phenomenal growth of the urban population of the United States within the past half century the experts of the United States Bureau of Education are of the opinion that "how to educate the city child is the greatest problem facing the educational world." They fortify their contention further by drawing the following striking picture of the city child, his environment, and his problems:

"The city is a good place for adults to carry on business, to attend lectures, concerts, etc., but in the modern city there is almost nothing for the child to do except run the streets, loaf, and go to school. Yet, the child is in school only one fifth of the hours he is awake each year. This is no doubt long enough time to devote to formal schoolwork, or to the three R's, but children need other things as well. They used to know how to work with their hands; they need to play. Yet, there is little opportunity for city boys or girls to do any constructive work. There are practically no chores for them to do. It is a rare city that provides enough playground space for its children. There is but little contact with nature, especially for children living in tenements and apartment houses. All these-work, play, and contact with nature—are fundamental in the education of children, and unless the cities of the country provide these fundamentals, the city child will receive only an artificial education-what he reads in the books."



Welcome the New Official.

The conclusion which the bureau draws from this picture centers upon the need of a comprehensive grasp of the problem, and of such administrative machinery as may deal with the same efficiently and completely. It contends that "the administration of city schools has become a complicated matter, as much so as the administration of a large private corporation. The expenditure of millions is involved in the larger cities and of many thousands in the smaller ones. Buildings to keep pace with growth in population must be provided. Equitable salary schedules must be considered. Courses of study must be adopted to meet present-day needs. Thus, one might continue to enumerate the problems facing the authorities in every city."

It is probably not unreasonable to hold that with the growing shift of the population from the country to the city, and the increasing complexity of the urban-school problem, that there has been also a notable progress in administrative efficiency as applied to city-school systems. The modern city board of education is something quite different from the city board of education of a half century ago.

The oldtime school board with its large membership, its spectacular debates, its cumbersome committee system, and its political pulls—is practically a thing of the past. In its place has come not only a smaller and quieter body, but a more thoughtful, circumspect, and expeditious body. The large school board tried to run the schools and made a mess of it; the smaller board hired the educational expert to undertake that job and saw to it that the job was well done.

The real progress in school administration during the past three decades has not been so much in the mere change from large to small boards, as it has been in defining the scope and function of both school board and superintendent, and fixing upon a logical relationship between the two. When the member of the board of education realized that he was unfit to appoint teachers, select textbooks, or to build a course of study, but that he was expected to delegate the task to those fitted to do these things, and to hold them responsible, a long step toward efficient school administration was won. When that same member found his own job, namely, learned that there were many important things which came strictly within the province of that job, progress in school administration was well under way.

If the task of educating the city child may be said to be a difficult one, and the administrative problems connected therewith complex, it may also be said that the administrative machinery as exemplified in the modern board of education and the superintendent of schools, is fully equal to meet that task and to solve that problem. The type of men and women that serve on the boards of education of today may be no higher in point of character and fitness than were those who served three decades ago, but it is clear that they have a proper conception of the sacred duty that is upon them and are possessed with the ability to fulfill it to the satisfaction of the American people.

#### FOUNDATION OF SUCCESS

Until communities recognize that their school system is one of the foundations of their success in every line of endeavor there never can be the proper respect for education inculcated in parents' minds, and the difficulties of bringing in the children of the community thereby are increased.

-Henry J. Gideon, Philadelphia, Pa.

## An Analysis of St. Louis Traffic Accidents

To Children of Five to Sixteen Years Inclusive For the School Year of 1925-1926

T. C. Holy, Ohio State University

According to the United States census reports, the total number of automobiles and trucks registered in the United States in 1916 amounted to 3,512,996, while for the year 1926, only ten years later, the number had increased to 20,051,276, or a total increase of 471 per cent. From this same source it is found that the number of deaths due to traffic accidents increased from 795 in 1916 to 22,500 in 1925, an increase of 2,730 per cent during the nine-year

From the above figures it is found that the ratio of traffic fatalities to the number of automobiles and trucks registered in 1916 was one traffic death to each 4,419 motor vehicles, while the ratio of the 1925 traffic fatalities to the 1926 motor registration was one to each 891 vehicles. If the number of 1926 traffic fatalities was larger than the number in 1925, obviously the ratio would be decreased. Traffic fatalities, even when the increase in the number of vehicles is taken into account, was approximately five times as great in 1926 as in 1916.

This enormous increase in motor-driven vehicles has created a new problem for the schools. In the 1916 courses of study little or no attention was given to safety, but at the present time practically every city- and villageschool system in the country is placing more or less emphasis on the vital problem of the safety of the children.

Our efforts to reduce the casualties resulting from traffic accidents have given rise to various organizations. Public-spirited citizens have organized safety councils; police and welfare departments conduct schools for motorists and disseminate safety literature; traffic squads of schoolboys under the guidance of principals and teachers direct the movements of pupils across heavily travelled thoroughfares; while other organizations such as the Boy Scouts are utilized in a concerted effort to reduce traffic tolls. Only a decade ago it was thought desirable to locate school buildings on main thoroughfares, but at present one of the first considerations in the selection of school sites is to so locate the buildings that the minimum number of pupils will be required to cross arterial highways in going to and from the schools.

In an effort to ascertain when, where, and to whom, so far as age is concerned, do traffic accidents occur, the writer made an analysis of all the accidents reported to the police occurring to children between the ages of 5 and 16 years inclusive for the school years 1924-25 and 1925-26. The records from which these data were taken are on file in the offices of the St. Louis Safety Council who, in turn, secured the information found on the record from the St. Louis Police Department. These records give a rather detailed report of each accident, indicating the time, place, nature of accident, race, sex, and age of victims, together with the patrolman's judgment of the cause. Two forms of record are kept, viz., one for the injuries and one for the fatalities. In those cases where fatally injured children later died, the coroner's office advised the council to that effect, so a new record was made out for each of these individuals. The detailed material, showing the time and age distribution of both injuries and fatalities, is presented here only for the period of September 1, 1925, to July 1, 1926, although the data were gathered for both 1924-25 and 1925-26. Because of the manner in which the files were kept, it was desirable to take the data for whole months, so the above period has been used instead of September 6, 1925, to June 16, 1926, the ten school months' period during which the schools were in session.

Table I, showing the number of traffic injuries occurring to children between the ages of 5 and 16 years inclusive for the period of September 1, 1925, to July 1, 1926, is presented

groups the number of accidents between midnight and 7 o'clock was 3, so that explanation does not apply to this case.

So far as the total number of injuries are concerned, it will be seen that the 6-year-old group suffers heaviest with a total of 93, closely followed by the 7-year-old group with a total of 86. The 5-year-old group comes next with a total of 80, followed by the 8- and 10-year-old groups, each with a total of 70. Within the childhood period, the ordinary assumption is that, as the age of the child increases, the traffic dangers decrease. Such is not the case in these tabulations, for it will be seen that the number of accidents occurring to the 14-, 15-, and 16year-old groups are greater in every case than

,	Distribution	of St.	Louis	Traffic	Injur	ies by	Age	Groups	and	One-l	Hour	Period	ls fro	m		
				septe	mber	1, 192	5, to	July 1,								
Time				ee	0					roups						Total
	A M			9	0	4	8	9	10	11	12	13	14	15	16	
1:00 1:50	A. M		• • • • • • •		1		0.0	1	1				1	1	2	7
0.00 0.80	A. M			. 1		0.0	* *			1						2
2:00- 2:09	A. M				1	1						* *				2
3:00- 3:59	A. M			. 2	0.0				1						1	4
4:00- 4:59	A. M									1		1				2
5:00-5:59	A. M				* *		4 0		1		1	1	1			4
6:00-6:59	A. M					2			1	1			1			5
7:00-7:59	A. M			. 1	1	1			2	2	1	2	1	1	4	16
8:00-8:59	A. M			. 2	4	9	4	2	6	1	3	2	9	3	9	40
9:00-9:59	A. M			. 2	3		4	3	3	-	1	5	5	1	Ä	30
10:00-10:59	A. M			. 7	3	4	4	3	5	2		2	2	- 6	1	38
11:00-11:59	A. M			. 4	3		4	1	6	2		1	4	9	- 2	34
					_		-			0				0	0	0.1
Totals	for A. M			. 19	16	22	16	10	26	11	6	12	15	12	19	184
	P. M				16	-6	10	5	4	11		12	13	12	19	194
1:00. 1:50	P. M			· a	20	6	9	4	4		0	0	*		0	00
2:00- 2:50	P. M			. 0	5	6	- 0	4	*	2	6	2	1	1	3	41
	P. M				12	49	40	2	2	3	• •	2	- 2	2	2	37
	P. M				13	10	13	10	9	4	7	7	4	4		93
# .00- # .09	P. M			. 3		40	9	10	8	9	3	5	6	7	5	76
0:00- 0:39	P. M			. 9	13	13	6	5	7	8	5	4	3	4	3	76
6:00- 6:59	P. M				6	9	4	8	4	4	4	7	4	8	4	63
7:00- 7:59	P. M			. 10	1	2	5	1	3	10	7	3	5	3	3	53
	P. M				3	3	4	2	4	3	5	. 3	3	3	5	43
9:00- 9:59	P. M			. 1	2	2	1	2	1		4	1	2	2	3	21
	P. M				1	3	2	3	2	6		2		2	4	25
11:00-11:59	P. M				2			1		2			4	3	4	17
Totals	for P. M			. 61	77	64	54	49	44	51	46	39	38	43	39	605
	ees											_		-	_	_
Grand	Total			. 80	93	86	70	59	70	62	52	51	53	55	58	789

It will be observed from Table I that the total number of traffic accidents to St. Louis children between the ages of 5 and 16 years inclusive amounted to 789, of which 184 occurred in the forenoons and 605 in the afternoons. This number amounts to about 1 for each 1,800 children between the ages of 5 and 16 in the city. It will be further seen that the 6-year-old group suffers heaviest in the afternoon, having 77 injuries. These are closely followed by the 7-year-old group with 64 injuries and the 5-yearold group with 61. The 10-year-old group, with a total of 26 injuries, suffers heaviest in the forenoon accidents. No explanation can be given as to why the number of injuries to the 16-year-old group in the forenoon amounts to the same as the 5-year-old group. One explanation offered was to the effect that the 16-year-old group arose earlier in the mornings and was. therefore, exposed over a longer period of time than the 5-year-old group. Referring to the table, however, it will be seen that in both

those of the 13-year-old group. These differences, while small, may not be significant, although they may be due to the adolescent period in which the child becomes conscious of his individuality and tends, therefore, to disregard the warnings of parents and teachers.

Relative to the time when most accidents occur, it will be seen that the heaviest toll in the forenoon is taken between the hours of 8 and 9 o'clock, the period when pupils are on their way to school. In the afternoon the largest number of injuries, 93 in number, occur between the hours of 3 and 4 o'clock, the time during which most pupils are on their way home from school. Between the hours of 4 and 5, and 5 and 6, there were 76 injuries for each of these one-hour periods. This is during the time when traffic is heaviest, also the period when a large number of children, especially in the congested districts, are playing in the streets. During both of these late-afternoon (Continued on Page 68)

TABLE II

Distribution of St. Louis Traffic Fatalities by Age Groups and One-Hour Periods from
Sentember 1, 1925 to July 1, 1926

	Septe	mber	1, 1925,	to	July	1, 1926							
mi	-	_	_		-	Age (	Froups						Total
Time	5	6	7	8	9	10	11	12	13	14	15	16	
12:00-12:59 A. M													
1:00- 1:59 A. M	1												1
2:00- 2:59 A. M													
3:00- 3:59 A. M	0 0												
4:00- 4:59 A. M													
5:00- 5:59 A. M													
6:00- 6:59 A. M													
7:00- 7:59 A. M													
8:00- 8:59 A. M										1			1
9:00- 9:59 A. M					1								1
10:00-10:59 A. M													
11:00-11:59 A. M				1						i			2
	-	_	_	_		-							
Totals for A. M	1			1	1					2			5
12:00-12:59 P. M		2											9
1:00- 1:59 P. M	1						• •				î		9
2:00- 2:59 P. M			1				0 0			* *	_		- 1
3:00- 3:59 P. M	1	1	2		* *							* *	4
4:00- 4:59 P. M		1				* *	9 0	i	i				2
5:00- 5:59 P. M		2		1				-	-	* *		1	4
6:00- 6:59 P. M.		1	1					1		1			*
7:00- 7:59 P. M	i						1			_			4
8:00- 8:59 P. M				1		0 0							2
9:00- 9:59 P. M.				-				0 0					, 1
10:00-10:59 P. M.	9.4	14					* *			0 0		0.0	• :
11:00-11:59 P. M.		4			* *	* *	* *			0.0			1
11.00-11.00 F. M								0 0		0 0			1
Totals for P. M	3	9	4	2	_	_	1	2	1	1		_	
Ittale for F. M	0	9	4	-			1	4	1	1	2	1	26
Grand Total	A	9	4	3	- 1		1	9	1	-	- 0	_	31
Grand Authiographic actions and action and action and action and action action and action act	**	29	- 1	0.00		0.0		- 64		- 65	22	- 1	33

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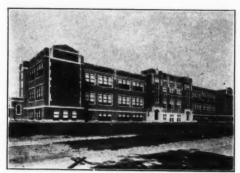
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## AN ANALYSIS OF ST. LOUIS TRAFFIC ACCIDENTS.

(Continued from Page 66)

periods the number of injuries is in excess of those during the noon-hour period from 12 to 1 o'clock, when large numbers of children go home for lunch.

Table II, which shows the number of traffic fatalities occurring to children between the ages of 5 and 16 years inclusive for the period under discussion, is presented here in the same form as Table I, which lists only injuries. The total number of fatalities, as shown in this table, amounts to 31, of which 5 occur in the forenoon and 26 in the afternoon. As in the case of injuries, the 6-year-old group suffers most

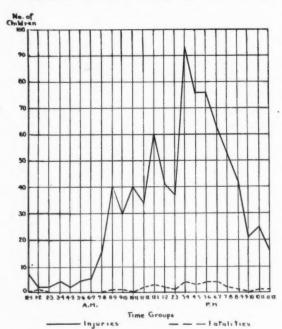


FIG.1.

Distribution of Accidents to St. Louis Children by One Hour Periods of the Day for September 1, 1925, to July 1, 1926.

with a loss of 9 children. This group is followed by the 5- and 7-year-old groups with a total of 4 each. Relative to the time when the fatalities occur, there were 4 each for the one-hour periods from 3 to 4, 5 to 6, and 6 to 7. The same explanation offered for the injuries would apply to the fatalities, viz., between the hours of 3 and 4 the children are on their way home from school while during the other two periods of heaviest traffic large numbers are playing in the streets.

In order to show the situation at a glance, both with respect to the age groups and the time of day when the accidents occur, the data shown in Tables I and II have been graphically prepared. Figure 1 shows the distribution of accidents to St. Louis children by one-hour periods of the day for September 1, 1925, to July 1, 1926. In this figure both injuries and fatalities are shown. It will be seen from this figure that there are three rather pronounced peaks, one between the hours of 8 and 9, another from 12 to 1, and the third from 3 to 4. These peaks, of course, correspond to the time when the children go to school, go out or home to lunch, and go home at the close of school. In fatalities these peaks are not quite so pronounced. Figure 2 shows the distribution of both injuries and fatalities by age groups. As pointed out in the discussion of both Tables I and II, the 6-year-old group suffers most in both injuries and fatalities. The rise in the case of injuries occurring to the 14-, 15-, and 16-year-old groups as contrasted with those occurring to the 13-year-old group is quite noticeable when graphically presented.

As noted earlier, these same data on traffic injuries and fatalities were tabulated for both the school years 1924-25 and 1925-26. In order to show comparisons of both injuries and fatalities for these two school years, Table III, listing both injuries and fatalities by age groups for the two years, has been prepared and is here presented.

It will be seen from the above table that the number of traffic fatalities was 38 in 1924-25 and 31 in 1925-26, a decrease of 7. In the case of injuries the situation is reversed. In 1924-25 the total number of injuries was 667 while in 1925-26 there were 789, an increase of 122, or an 18-per-cent increase over the preceding year. Part of this may be due to more vigilance on the part of the St. Louis police department in reporting accidents and providing medical attention for those injured. It should be pointed out here that the criterion of injuries in both periods has been to include all cases requiring medical care. It may be that less minor injuries were given medical attention and treatment in 1925-26 than was the case in 1924-25 which, of course, would increase the number of reported accidents. In view, however, of the yearly increase in traffic accidents throughout (Concluded on Page 70)

TABLE III Comparison of St. Louis Traffic Injuries and Fatalities by Age Groups for the Approximate School Years 1924-25 and 1925-26

						Age	Groups						Total
Years	5	6	7	8	9	10	11	12	13	14	15	16	
1924-25	92	81	61 86	71 70	52 59	51 70	29 62	47 52	33 51	55	57	16 38	667
1925-26	80	93	86	70	59	70	62	52	51	53	55	58	789
		I I	3. Fa	talitie	16								
						Age	Groups	1					Total
Years	5	6	7	8	9	10	11	12	13	14	15	16	
1924-25	7	5	10	5	2	2		2	3	2			38
1925-26	4	9	4	3	1		1	2	1	3	2	1	21

A. Injuries



FERRIS SCHOOL, HIGHLAND PARK, MICH.

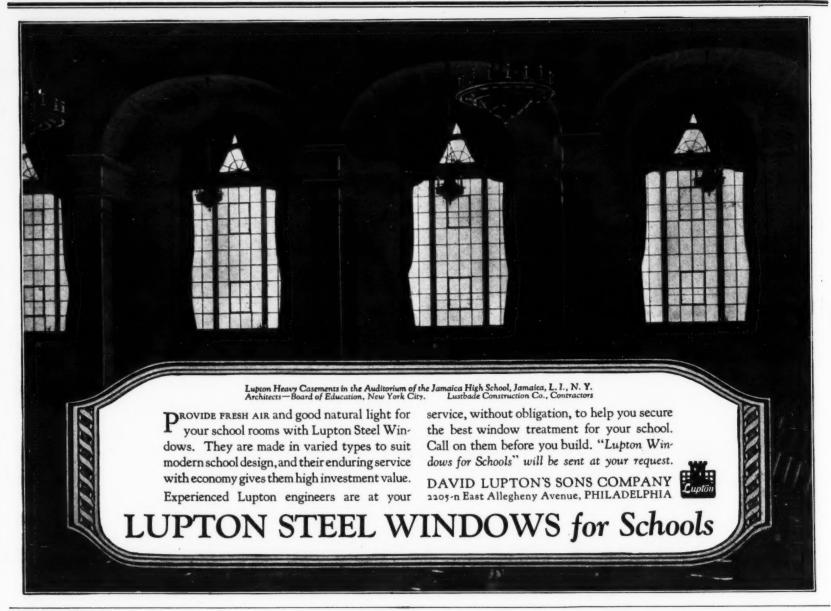
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(Concluded from Page 68)

the country, the probabilities are that the major portion of this difference represents an actual increase in traffic accidents of children of these When the totals for the two years are taken together the figures seem appalling. For the two-year period the total number of injuries and fatalities reported amounted to 1,525 children, or enough to make two fairly good-size elementary schools. Certainly such a toll demands the interest and cooperation of every citizen in the city of St. Louis in an effort to reduce this tremendous traffic cost.



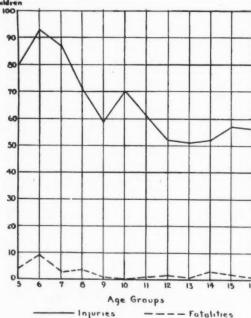


FIG. 2. Distribution of Accidents to St. Louis Children by Age Groups for Period September 1, 1925, to July 1, 1926.

The major purpose in the tabulation of these data was to determine the streets and intersections which were most hazardous to school children. In order, then, that this material might be made usable, spot maps of the city showing the location of both injuries and fatalities were prepared. For the year 1925-26, in addition to showing the location of these accidents, the location of all traffic signals, traffic policemen, and those policemen specially detailed for dangerous crossings in the period when children were going to and from school were included on this spot map. This information was furnished in detail by the police who cooperated in every effort to reduce traffic accidents. This material was then used when district boundary lines were being determined for the purpose of keeping the number of children required to cross dangerous thoroughfares and intersections at the mini-

Very frequently parents requested the transfer of their children to other schools, giving as the reason the avoidance of dangerous streets and intersections which it was necessary for them to cross in reaching their own school. Often the statement was made that a certain street was the most dangerous in the city, whereupon the maps were consulted to ascertain what actually happened in connection with that street. This material was usually convincing, and the requests were either withdrawn or others given.

These maps were also utilized by the traffic engineer of the city in the determination of the proper location of additional traffic signals. On the whole, the material was found to be very effective in a large number of instances, in fact, so helpful that the yearly tabulations will probably continue.



Schools and School Districts School districts are political subdivisions of the state, deriving powers from the state and subject to liabilities imposed under the statutes.—Jacobberger v. School Dist. No. 1, Multnomah county, 256 Pacific Reporter, 652, Oreg.

School districts are mere agencies of the state for educational purposes ordained by the legisla-ture.—Gilberton Borough School Dist. v. Morris,

137 Atlantic Reporter, 864, Pa.

The word "may" in statute permitting the county school boards to create rural separate school district, is used in the discretionary, and not in the mandatory sense (Miss. Laws 1924, c. 283, § 118).
—State v. Morgan, 112 Southern Reporter, 865, Miss.

A condition subsequent that land revert to the owners if not used for school purposes, was not abrogated by a voluntary merger of the school districts (Montana rev. codes 1921, § 1034).-Waddell v. School Dist. No. 3 of Ravalli county, 257 Pacific Reporter, 278, Mont. On the annexation of a part of a township to

the school city, the apportionment of revenue from the town levy on basis of taxable values is held equitable.—Lafayette School Twp. v. School City of Anderson, 157 Northeastern Reporter, 118, Ind.

An election required by the statute for organizing a high-school district is a "special election" (School Law [Illinois Laws 1909, p. 367, § 88, as amended by Laws 1911, p. 507, and Laws 1917, p. 737]).—People v. Rogler, 157 Northeastern Reporter, 177, 326 Ill. 310.

A board of education may divide the county into high-school districts and may require the residents in each to attend the school therein (Ky. St. §§ 4399a4, 4526b1 to 4526b3; Ky. St. Supp. 1926, § 4399a7).—Reed v. Mason county board of education, 295 Southwestern Reporter, 436.

School-District Government
A decision of the Texas state board of education is conclusive on questions of fact if it is supported (Continued on Page 72)

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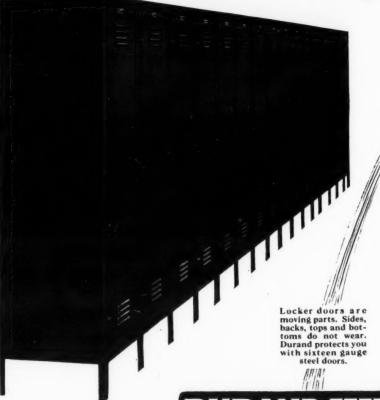
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(Continued from Page 70)

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by any evidence, but it is appealable on questions of law.—Brazoria Independent School Dist. v. law.-Brazoria Independent School Weems, 295 Southwestern Reporter, 268, Tex. Civ.

App.

The decision of the Texas state board of educa-

The decision of the Texas state board of education without any support in evidence may be appealed from on such ground.—Brazoria Independent
School Dist. v. Weems, 295 Southwestern Reporter,
268, Tex. Civ. App.

The acting county attorney, when not showing
that the state was interested, is held without right
to appear in a taxpayer's suit attacking title of
the member of the school board to office because
of an illegal election.—O'Brien v. Gassoway. 256 of an illegal election.—O'Brien v. Gassoway, 256
Pacific Reporter, 920, Okla.
The citizens and taxpayers of a school district

are held without right to attack the title of a mem ber of the school board to office because of an illegal election.—O'Brien v. Gassoway, 256 Pacific Reporter, 920, Okla.

The court of common pleas must act en banc in appointing the school directors (Pa. St. 1920, § 4609).—In re Hanover Twp. School Directors, 137 Atlantic Reporter, 811, Pa.

Atlantic Reporter, 811, Pa.

Where it does not appear that the court's appointment of school directors was by the court en banc, the supreme court will set aside orders and require appointment by the court en banc (Act May 22, 1922, § 13 [1 Smith's Laws, p. 140]; Pa. St. 1920, §§ 487, 551).—In re Hanover Twp. School Directors, 137 Atlantic Reporter, 811, Pa.

The president of the school board is held a de facto officer, regardless of his accepting office as justice of the peace (Code, c. 7, § 15).—Privett v. Board of Education of Slab Fork School, Dist. in Wyoming county, 138 Southeastern Reporter, 461,

Wyoming county, 138 Southeastern Reporter, 461,

The evidence held to show that the member of the school board, moving from the district for a temporary purpose, did not vacate his office (West Virginia Code, c. 45, § 43).—Hite v. Irby, 138 Southeastern Reporter, 329, W. Va.

A member of the board of education, moving to another district for temporary purpose, intending to return, does not vacate his office (West Virginia Code, c. 45, § 43).—Hite v. Irby, 138 Southeastern Reporter, 329, W. Va.

The members of the board of education selected by the city council are town officers not removable

except for causes enumerated (Alabama School Code 1924, §§ 154, 155, 156; Const. 1901, §§ 173, 175).—Wright v. Cook, 113 Southern Reporter, 252,

The validity of the removal of school directors by a single judge cannot be attacked on appeal, where the judge's right to remove directors was not challenged in a lower court.—In re Hanover Twp. School Directors, 137 Atlantic Reporter, 811,

Pa.

The director of an independent school district taking oath need not take a second oath when Gen. St. 1923, §§ 2805-2807, 2813, chosen treasurer (Gen. St. 1923, §§ 2805-2807, 2813, 6963; Laws 1925, c. 124; Minnesota Const. arts. 5, 8).—Independent School Dist. No. 21 at Willow River v. Integrity Mut. Casualty Co., 214 Northwestern Reporter, 258, Minn.





THE MAN WHO HAS CHILDREN AND THE MAN WHO HAS NONE.—Chicago Tribune.

School-District Property

School-site-and-building elections are held valid, after an amendment of school board's records to show the finding of sufficient number of signatures to petitions (Illinois Laws 1919, p. 926, amending School Law, § 127, par. 5, as amended).—Phenicie v. Board of Education of St. Joseph Community High School Dist. No. 305, 157 Northeastern Reporter 34, 298 Illinois 72 porter, 34, 326, Illinois, 73.

A statute vests the county superintendent with discretionary power to approve a site of school lands selected by school board (West Virginia Code, c. 45, § 49).—Privett v. Board of Education of Slab Fork School Dist. in Wyoming county, 138 Southeastern Reporter, 461, W. Va.

The county superintendent's refusal to approve a schoolhouse site may not be judicially reviewed, except for clearly willful and arbitrary disregard of duty, or caprice, passion, partiality, or corruption (West Virginia Code, c. 45, §§ 49, 50).—Privett v. Board of Education of Slab Fork School Dist. in Wyoming county, 138 Southeastern Reporter, 461, W. Va

A compromise of the school-building contractor's unliquidated claim for damages against the board of education is binding on the comptroller, in the absence of fraud.—Brennan v. Berry, 222 N. Y. S., 355, 129 Miscellaneous Reporter, 671, N. Y. Sup.

The employment of an architect for the entire building of which only part was to be erected at a time is held reasonable exercise of the school board's authority (Oreg. L. §§ 5152, 5187, 5202, 5205, 5208).—Jacobberger v. School Dist. No. 1, Multnomah county, 256 Pacific Reporter, 652, Oreg.

The school board's authority to employ an architect for a school building is held limited by reasonableness, good faith, and statutes (Oreg. L., §§ 5152, 5187, 5202, 5205, 5208).—Jacobberger v. School Dist. No. 1, Multnomah county, 256 Pacific Reporter, 652, Oreg.

The architect's contract with a school district was not invalidated by a delay in building caused by war conditions.—Jacobberger v. School Dist. No. 1, Multnomah county, 256 Pacific Reporter, 652,

An architect's acting on a contract for services is held an indication that he has accepted the school district's proposition.—Jacobberger v. School (Concluded on Page 75)

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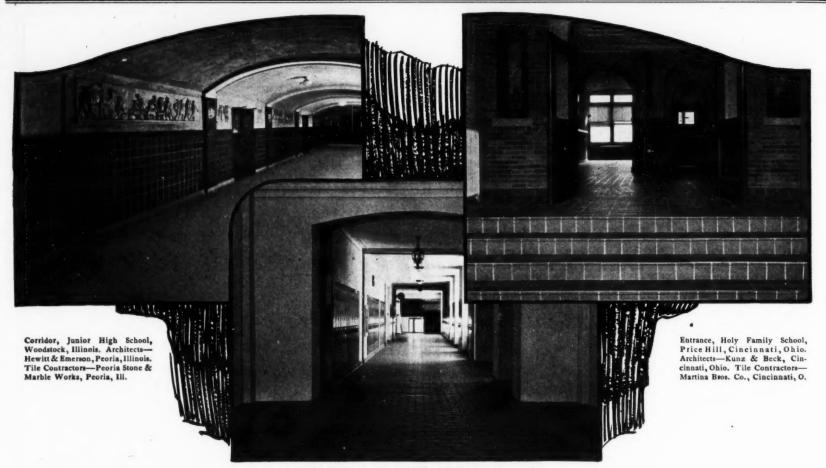
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"BOY-PROOF", in relation to floor and wall materials, means the ability to withstand the pounding of grimy heels, the scraping and scuffing of thousands of feet, the kicking and "slam-banging" which is a part of the average youngster. — And after years of this ordeal, the floor and wall materials must be fresh, bright, unmarred and beautiful.

Romany Quarry Tiles have won the reputation of "boy-proof" in actual service. Floors and walls of these tiles have withstood wear, boys and the elements for years and years—their original beauty unmarred.

Easy to keep bright and clean, economical in first cost and with practically no upkeep cost; a specification of Romany Quarry Tiles provides a permanent asset of real beauty.

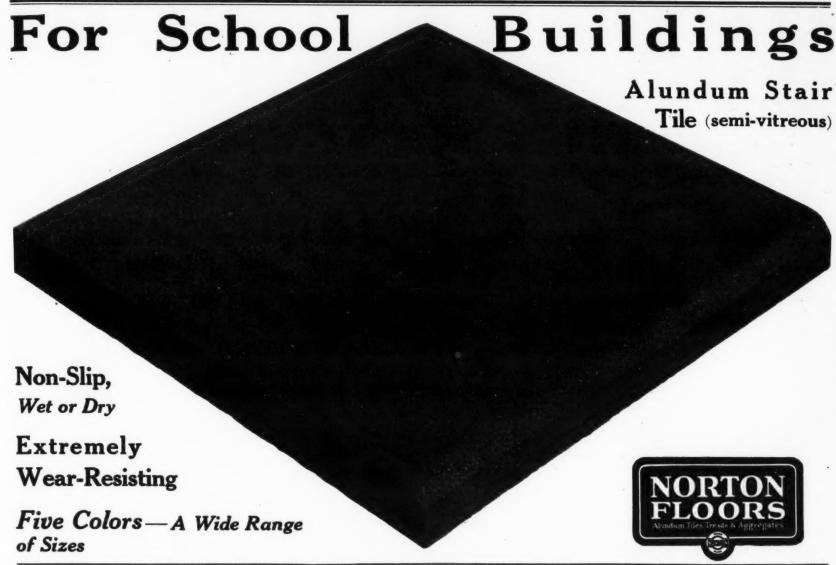
> Romany Quarry Tiles are an American product. They are made in Romany Reds, Romany Greys, Romany Browns, and a medley of golden shades that range from dark russets through the tans to pale greens—the beautiful Romany Rainbow Tiles.











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(Concluded from Page 72)

Dist. No. 1, Multnomah county, 256 Pacific Reporter, 652, Oreg.

The inexpediency of completing a school building because of building costs would not relieve the district for contractual liability to the architect.— Jacobberger v. School Dist. No. 1, Multnomah county, 256 Pacific Reporter, 652, Oreg.

School-District Taxation

The payment by the bank of the school district's orders sold to others and indorsed, "Not paid for want of funds," did not discharge district's liability in a suit on the treasurer's bond.—Independent School Dist. No. 21 at Willow River v. Integrity Mut. Casualty Co., 214 Northwestern Reporter, 258, Minn.

A school-bond-election judge's consistent with the school bond-election in the school bond election in the school district's account to the school district's want of the school district's liability in a suit on the treasurer is bond.—Independent School Dist. No. 21 at Willow River v. Integrity and the school bond election in the school election in the scho

porter, 258, Minn.

A school-bond-election judge's acquiescence in the voters' selection of clerks made them his "appointees" (Texas rev. St. 1925, art. 3001).—Lewis v. Stanton. Independent School Dist., 294 Southwestern Reporter, 863, Texas.

Clerks selected by the voters present, being de facto clerks, irregularity of their selection did not invalidate a school-bond election.—Lewis v. Stanton Independent School Dist., 294 Southwestern Reporter, 863, Texas.

porter, 863, Texas.

The school taxes are "state taxes."—Commonwealth v. Louisville Nat. Bank, 294 Southwestern

Reporter, 815, 220, Ky. 89.

The statutory provision limiting the rate of school tax is controlling.—Gilberton Borough School

Dist. v. Morris, 137 Atlantic Reporter, 864, Pa. A school district is held not authorized to levy a tax about statutory limit to provide a sinking fund to pay the indebtedness within 30 years, as statute (Pa. School Code, 1911, § 507 [Pa. St. 1920, § 4760], and § 1210 subd. 24, as amended by Act May 23, 1923 [Pa. St. Supp. 1924, § 4997a12]; Const. art. 9, § 10).—Gilberton Borough School Dist. v. Morris, 137 Atlantic Reporter, 864,

The testimony of a school directors' clerk is held to justify an amendment of the record to show a levy of tax at a meeting held within the statutory time (Illinois School Act, § 190).—People v. Chicago M. & St. P. Ry. Co., 157 Northeastern Reporter, 200, 326 Illinois, 179.

A school directors' record may be amended to prock the truth where conducts of the state of

speak the truth, where a clerk's default does not affect the substantial justice of a tax, which the evidence clearly shows was regularly levied .- People v. Chicago M. & St. P. Ry. Co., 157 Northeast-ern Reporter, 200, 326 Illinois, 179. The school directors' minutes and the clerk's tes-

timony are held to justify an amendment of the record to show tax levy of total of sums which minutes stated were agreed on.—People v. Chicago M. & St. P. Ry. Co., 157 Northeastern Reporter, 200, 326 Illinois, 179.

The certificate of the voters' approval of a school-tax levy at an election held after the date of the certificate is insufficient.—People v. Chicago M. & St. P. Ry. Co., 157 Northeastern Reporter, 200, 326 Illinois, 179.

The provision for the collection of school taxes by the state revenue agent is held not to be an invasion of the constitutional provision against the legislature's authority to collect taxes for municipal corporation (Ky. const. §§ 181, 181a; Ky. St. § 4263-4).—Commonwealth v. Louisville Nat. Bank, 294 Southwestern Reporter, 815, 220 Ky. 89.

School-District Claims

School-District Claims

The compromise of the school-building contractor's unliquidated damage claim against the board of education is held to be an "audit" within the statute (Education Law, § 880, subd. 3).—

Brennan v. Berry, 222 N. Y. S. 355, 129 Miscellaneous Reporter, 671, N. Y. Sup.

Pupils

Requiring children to attend high school three miles away, to which they are transported by motor bus, is held not to be an abuse of the county school board's discretion (Ky. St. §§ 4399a4, 4526bl to 4526b3; Ky. St. Supp. 1926, § 4399a7).—Reed v. Mason county Board of Education, 295 Southwestern Reporter, 436, Ky.

A constitutional provision requiring school at

A constitutional provision requiring school at least six months every year is held not a limitation of the school term (N. Car. Const. art. 9, § 3).—Frazier v. Board of Com'rs of Guilfort county, 138 Southeastern Reporter, 433, N. C.

OREGON SCHOOL-LAW OPINIONS

C. H. Howard, superintendent of public instruction of Oregon, recently received several opinions on questions relating to the school laws of the state. One of the questions asked was "as to the right of a parent to send his children to school in the school district in which lies the greater portion of his farm land without payment of tuition, although the residence is situated just across the line in another district, in which district the children reside and have been enumerated for school purposes.'

The attorney general points out that the parent must have an "actual residence, home, or domicile" in the school district, hence those not enjoying such residence are subject to the tuition fee. He says: 'The residence of minor children who remain in the custody and care of their parents, is the domicile of such parents. If the actual domicile or home of the parents of such children is in a certain school district, it is likewise the home of all the minor

children who are in the custody of the parents. "It is, therefore, my opinion that the school district to which this parent may send his children without the payment of tuition is that in which his residence is established, even though the greater portion of his farm land may lie in an adjoining district."

The next question asked is "whether or not families may board their own children and to be paid for said board from the school funds of the district under the provisions of the chapter which relates to the right of a school-district school board to furnish pupils with room and board."

The opinion here rendered is that "children who

reside with their parents cannot have their board paid. The residence of the child is with his parents, and if that is within walking distance of school, no board or transportation can be furnished. In any event, a child is not boarded out when it is with its parents."

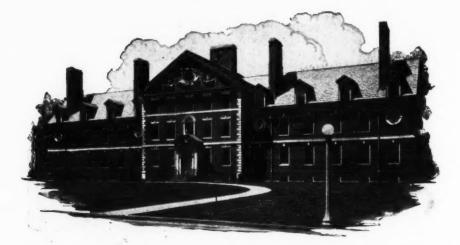
WISCONSIN SCHOOL-LAW OPINIONS
—The Wisconsin department of public instruction has ruled that a person who enters into a contract with a school board to supply the school with fuel wood of a stated kind on the school grounds, but who instead has furnished wood of a different kind and also has failed to have the wood on the premises, has breached his contract and it is entirely within the power of the board to award the contract to someone else. The school board is not obliged to accept an inferior quality of fuel, and it is the duty of the board to know that the fuel purchased and delivered is of good quality.

The department has also ruled that a school-dis-

trict board has not authority to enter into a contract with anyone to transport a teacher to and from her boarding place. Where a teacher makes her home with a family having children in attendance at the school, there is no reason why, if the accommodations permit, she should not be taken along with the children.

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College Hospital uses
Tontine shades exclusively McKinley University Hospital University of Illinois



Du Pont Tontine was chosen exclusively to shade the windows of the recently completed McKinley University Hospital of the University of Illinois. Charles A. Platt, New York, and James M. White, of Champaign, Ill., Architects.

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WINDOW SHADE

DU PONT OBSERVES A CENTURY AND A QUARTER OF USEFULNESS TO THE AMERICAN PEOPLE.

Under another decision, it is brought out that a teacher who is not legally qualified to teach in the county may not legally serve as a substitute for the regular teacher. If a substitute is to be en-gaged even for a day or so, it is the duty of the board to know that she is legally qualified. Still another decision is to the effect that a

school board must deny school privileges to a child whose conduct, because of a lack of mental ability and self-control, is detrimental to the discipline of the school and the welfare of the children while engaged in games on the school grounds or on the road to and from school.

### SCHOOL-LAW NOTES

—The question as to whether business concerns whose owners were members of the board of education could sell goods to the schools has come under consideration at Stevens Point, Wis. The city attorney in response to a request for an opinion recently said: "The supreme court has held that contracts or dealings between a corporation and a city or school board are void in cases where an officer or agent of the corporation is also an officer of the city or of the school board, respectively. In a recent case a corporation was unable to recover the purchase price of materials furnished by reason of the fact that the manager and treasurer of the corporation was also an officer of the school board for which the materials were furnished. The same rule applies where the corporation in question furnishes the materials to a contractor who has a contract with the city or school board. The main question is whether the city officer is interested in or has or acquires a pecuniary interest in the contract or dealing in question."

The school board of Mitchell, Kansas, has been sued by a Wichita firm of architects for breach of contract. It is contended that the board employed the architects and then switched to another firm. The board holds that the architects were engaged to provide a plan for a schoolhouse not to exceed \$25,000 in cost. When the bids came in it was found that the building would cost \$32,000. the board believed itself absolved from further obligation. The second firm will build the school for \$23,000.

-New York, N. Y. Supt. William J. O'Shea of the city schools recently issued instructions to district superintendents, principals, and janitors, urging that the regulations against interference with traffic and emergency dismissals of pupils be rigidly enforced.

In the past, Supt. O'Shea has frequently called attention to the fact that automobiles must not be parked on any part of the school premises or in front of the schools in such a way as to interfere with the dismissal of pupils or the prompt arrival of fire engines. In spite of instructions it has been found that the regulations have not been obeyed in many instances.

### SCHOOL CHILDREN KILLED BY AUTOMOBILES

A meeting of the National Safety Council held at Chicago has brought out the statement that

last year 7,000 school children were killed by motor cars and 140,000 injured.

One of the speakers said that "it is fair to state that if the knowledge obtained from the present archives of our organization were carefully applied to the known accident hazards, 95 per cent of all kinds of accidents could be eliminated. Our most serious task at the present time is to get this information to the public."

Resolutions adopted by the safety council recom-

Resolutions adopted by the safety council recom-mend that all states and cities adopt an accidentreporting system so that effective preventive measures may be intelligently devised. Traffic surveys should be made, and drivers should all be licensed under state law to weed out unfit and irresponsible.

### ANNOUNCE DATE FOR PUBLIC-SCHOOL BUSINESS OFFICIALS' MEETING

President Mills of the National Association of Public-School Business Officials has announced that the next meeting of the Association will be held June 5 to 8, 1928, at Denver, Colorado. These dates have been set in view of the fact that the summer tourist rates go into effect after June 1, making it possible for the membership to save some money on railroad fares. It is expected that one or more of the railroads will run a special train out of Chicago to accommodate the members from the east who will attend the meeting.

At the Philadelphia meeting, Mr. Mills was asked to appoint three members of the association to canvass the school architects of the country with view of enrolling them as members of the asso-

ciation. The committee, which consists of Mr. H. D. Payne of Houston, Texas; Mr. William H. Gompert of New York City; and Mr. C. E. C. Dyson of Toronto, Canada, has already begun to function and it is expected that their work will show results

at the forthcoming meeting.

The executive committee of the association will meet in St. Louis, Missouri, on December 17, at which time the plans for the convention program will be arranged and whipped into shape. The committee on arrangements is in charge of

Mr. C. M. Schenck, chairman. and is composed of Mr. J. J. Ball, Mr. W. A. E. Stutt, Mr. H. B. Kepner, Mr. H. O. Bosworth, and Mr. H. W.

Information concerning the meeting may be obtained by writing to Mr. H. L. Mills, president, Houston, Texas, or to Mr. H. W. Anderson, Denver,

### PERSONAL NOTES OF SCHOOL OFFICIALS

—The position of supervising principal was created by the board of education of Dallas, Texas, on recommendation of Superintendent Normal R. Crozier. S. M. Lloyd, principal of the John Henry Brown School, was chosen for the new position.

-Arthur R. Matteson and Louis Schmerber are the principals chosen for schools No. 1 and No. 11 at Paterson, N. J.

-Mr. J. Ryan and R. R. McMahan have been reelected members of the Gooding, Idaho, of education for a three-year term, each without opposition.

—J. O. Block was appointed a member of the Clarence, Mo., school board.

-Elmer L. Ellis has been elected secretary of the school board of Seneca, Ill.

—By a vote of two to one, W. A. Nieman and E. R. McCoy were elected members of the school board at Sandpoint, Idaho.

—Senator L. H. Ellis of Shelby and Representa-tive A. M. Tunstall of Hale have been appointed members of the Alabama state board of education.

-The board of education of Jackson, Mich., has elected the following officers: President, George W. Scotford; secretary, Jay F. Clark; treasurer, Edward J. Frost. The reelected members are: Mrs. W. A. Foote, Horace S. Hunt, Charles W. Cruson, and Harold A. Tompkins.



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A Recent Duraflex-A Installation near Los Angeles.

Among other Lower California Duraflex-A Installations are
The Standard Oil Building, Los Angeles; The Children's
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## Walls





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economy, safety (can't
burn, crack, or fall
off), and because of
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All outer, exposed corners and all inner corners and ceiling angles should be protected by Milcor "Expansion" Corner Beads (Par'd.). They protect the corner and the adjoining walls against cracking and insure precisely straight corners. See "The Milcor Manual".

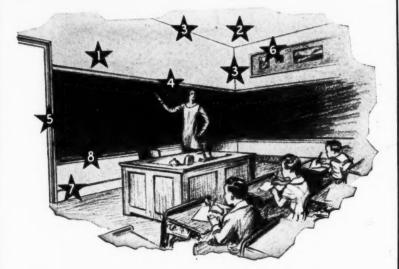


Metal Trim

This special Milcor "Expansion"
Casing (Pat'd.) was developed principally as a metal trim for plastering around blackboards, panels, etc. It c a n also be used for door w trim, eliminating wooden trim.



and window trim, eliminating wooden trim. See "The Milcor Manual".



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# Casings

## for Doors and Windows



Milcor "Expansion" Casings (Pat'd.) for door and window trim, eliminate expensive, clumsy, unsanitary wooden trim and help to make the school room more firesafe, more sanitary, neater and more pleasing in appearance. See "The Milcor Manual".



## Panel Trim

For special panels this solid met-al Milcor trim is very desirable.

al Milcor trim is very desirable.

It a d d s
m u c h t o
t h e finishe d appearance of the
room because of its neat and simple design.
It is sturdy—will outlast the building—and
is easily kept clean. See "The Milcor



## Base Screed



Milcor "Expansion" Base Screed
(Pat'd.) is the ideal base screed
because it provides a
perfect bond with the
wall base beneath. The
plaster oozes through
the network of expanded metal and gets a
firm grip on the lath
beneath. See "The Milcor Manual".



## Chalk Troughs

These Milcor Metal Chalk Troughs should be installed in

Troughs should be installed in Whether it be a new building or an old one to be remodeled, see that it has Milcor Metal Chalk Troughs. Details in "The Milcor Manual".

Other Milcor Products for schools include Ventilators, Skylights, Furnace Fittings, Met-al Roofing, etc. Write for Catalogs—FREE.

### MASSACHUSETTS STUDIES LUNCHEONS IN HIGH SCHOOLS

The Massachusetts department of education conducted in 1926 a special investigation of luncheons in high schools, for the purpose of ascertaining the practices of high schools in the serving of luncheons.

In the course of the study, data were studied from 242 of the 250 high schools in the state.

from 242 of the 250 high schools in the state. These data indicate that luncheon is now being served in 170 of these high schools. Of these schools, 55 reported that they serve 75 per cent of the school membership; 107, that they serve 50 per cent or over; 28, that they serve 25 per cent or less of the membership. One hundred and fifteen schools serve the whole school at one time. Fiftyfive schools serve luncheons to the school in sections—39 having two sections, and three reporting the use of three sections. the use of three sections.

The time allowed for luncheon varies greatly among the schools. Thirty-nine schools allowed 20 minutes; 27 allowed 25 minutes; 36 allowed 30 minutes. The median time for the luncheon is 25

In response to the inquiry as to the person in charge of the preparation and serving of the luncheon, 26 schools reported that the head of the domestic-science department had charge of the luncheon; 51, the domestic-science teacher; 26, an outside organization; and 33, some individual appointed by the school committee. A variety of methods of control was exhibited by the other 34 schools replying to this question. In 68 cases, the head of the domestic-science department decides what shall be served; in 20 cases, an individual employed by the school committee; and in 23 cases, some outside organization.

In 17 cases it was noted that the head of the home-economics department fixes the prices to be charged for the food served. In 51 cases, the teacher of domestic science does this; in 26 cases, some outside organization; and in 12 cases, an individual employed by the school committee. From the replies received, it is apparent that the head of the domestic-science department or the domestic-science teacher most often has charge of the serving of the luncheon in the high school. It is also indicated that this teacher has supervisory control chiefly and that the actual work is done by adult helpers hired by the school committee, or by pupils who generally receive some compensation for their services.

The town furnishes the equipment in 119 of the 170 schools. Twenty-eight schools reported that the town furnishes the equipment in part. The domestic-science teacher in 55 schools purchases the supplies; an outside organization, in 29 schools; and an individual employed by the school committee,

Replies to the question whether the surplus resulting from the operation of the lunchroom is turned over to the town treasury, showed that of 100 schools replying, 86 did not turn over to the town treasury any surplus; 14 reported that such surplus was turned over. Fifty-three schools reported that the surplus is used directly or indirectly for the improvement or the maintenance of the luncheon service. In some cases, the surplus was used for the benefit of athletics; in one case it was devoted to the expenses of the graduating class; and in another to help pay for the trip of the graduating class to Washington. It is apparent from the replies that a majority of the schools are not turning over the surplus to the town treasury but are making use of it in various ways.

### THE MANAGEMENT OF EVENING SCHOOLS

The evening school has become an integral part of every city-school system and is one of the im-portant forces which is rendering a democratic service for the advancement of adults who feel that they have for some reason or other missed an oppor-tunity in their youth. The night school has not always rendered efficient service as every school-man knows, and a good part of this is evidenced in the lack of holding power of the night school. In a recent bulletin to the teachers of the night schools at Miami, Florida, Mr. J. I. Sowers, director

of night-school work, calls attention to the causes which compel pupils to leave night school before the close of the term. Mr. Sowers finds that it is far more desirable to have permanent membership and effective work in the night schools than to have a large initial enrollment of pupils who do not remain and do not get the full benefit of the work Among the reasons which he assigns

are the following:

1. Failure to get out of the course the thing for which they came.

2. Inability to digest subject matter as presented.

3. Teacher has failed to catch interest in the first

Student is embarrassed by what he finds he does

5. Student does not know how to study and cannot apply himself.
6. Other causes are sickness, change of work or location.
The burden for keeping students in the night school rests almost entirely upon the teacher and

should be made one of the major responsibilities of the teacher. Mr. Sowers suggests eleven ideas for holding students as follows:

1. Organize the course along practical lines.
2. Find out at the beginning what students expect to get out of the course.
3. Take time at the start to explain the content of the course, what will be taken up, and how the subject will be developed.
4. Show the student where the course will function and how the things learned may be used.
5. In all the evening-school work, tie your objective close to the lesson. Give the student something he can use now.
6. Give each student something to do.
7. Don't be afraid to assign outside work, or research and reports. Evening-school students expect to work.
8. Look after absentees. (a) Organize the class

8. Look after absentees. (a) Organize the class and have the secretary send cards to those absent. (b) Have students notify you by post card when they will be absent from class. (c) Report all persons dropped to the office for further effort to develop interest.

dropped to the office for further interest.

9. If the student does not fit into your course, see if he cannot be a success if adjusted into some seeman.

see if he cannot be a success if adjusted into some other course.

10. Organize the class for better unity of the group. Evening-school classes present possibility for formation of better salesmanship clubs, art leagues, commercial students' clubs, American improvement associations, etc. Certain courses attract to themselves groups that can be capitalized for further work by self-activity within the group.

11. When the student has completed any unit of work, refer him to the other courses given in the school.

The teacher's own attitude toward the work for

The teacher's own attitude toward the work frequently spells success or failure in a night school. The instructor who expects to treat adults as he or she would treat children of school age invariably Mr. Sowers suggests seven elements in the attitude of the teacher toward the class. These are as follows:

Hold up the dignity of the class.
 Let the students know that you are interested

in their success.

3. Begin the class on time.

Begin the class on time.
 Have lessons prepared and assigned.
 Take the time before the close of the class period to assign the next lesson, tell them what is expected, where to get material, and how to study.
 If you have adopted a textbook in the course, use it, but do not fail to enrich the work with outside material.
 The best advertisement is a successful class, and trained, antisfied students.

trained, satisfied students.



New PeerVent Unit with front plate removed, showing improved fan housings (1), new position of air filter (2) under the fans, and the highly efficient new radiator (3).

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Send for the new PeerVent Catalogue and any special engineering data that you may require. If you are planning a building which requires mechanical ventilation, send blue prints for a proposal and estimate. Or, on request, we will gladly send our local representative.

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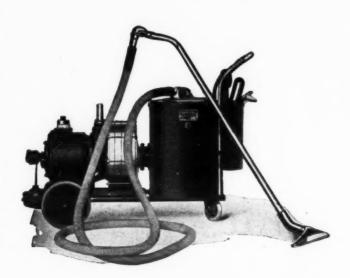
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# The Work of the School Janitor

G. K. Monroe, Deputy State Fire Marshal, Sidney, Ohio

Many educators are of the opinion that the janitor is about the most important person connected with the school. Quoting from good authority, we have the following statements:

"The janitor of a modern school building is, next

to the principal, perhaps the most important officer in the school."

"The position of janitor is a very important one; no other individual about the school building, unless it is the principal, has so much influence over conditions which affect the health and safety of the

"A good janitor is harder to replace than a good teacher, and, in most cases, a good principal."

These statements are not extravagant. Few peo-

ple realize their truth; in fact, few people, even school officials, have gone so far as to give the subject serious thought.

The lack of appreciation of the janitor's position is no doubt due to the failure to realize that the requirements in this branch of the public service

requirements in this branch of the public service have not grown along with the advancement made in educational matters generally, and especially in the matter of school buildings.

In the earlier day, the question of the janitor was not so important. About the only duties he was expected to perform were those of "building the fires and sweeping out." Now there are dozens of other duties for him to perform.

The development of janitors' duties, both in variety and importance, makes it necessary that he now be classed as a responsible and intelligent

now be classed as a responsible and intelligent school officer.

The janitor's relation to the school might be con-

- sidered under the following heads: Safeguarding property. Housekeeping standards.
  - 2.
  - Moral influence.
  - Control of health conditions.
  - Fire hazards and safety. 5.

Safeguarding Property

The man who is directly charged with the care and management of a school building of whatever value is of very great importance to a community; hundreds of janitors have charge of school plants, worth many thousands of dollars. The destruction of a school building is a "public calamity," "an

economic loss," and a community inconvenience. It usually requires several months at best to replace a school building; and in the meantime the pupils are often subjected to ill-provided quarters or sent to an already overcrowded school. Then, also, in the destruction of a school plant, a janitor probably several teachers are without school

employment.

The maintenance of the school plant and premises is an economic question, including heat, light, and water.

The janitor should have the courage to promote improvements and the energy and ingenuity to make the most of present conditions.
A good janitor is never truant.

Housekeeping Standards
The janitor sets the housekeeping standards of the school. He is to the school what the housekeeper is to the home. Examples of right living conditions are a fundamental in the plan of education. He sets the standards of cleribinary tion. He sets the standards of cleanliness and sanitary conditions of floors, windows, toilets, basements; he also has large control over the attractiveness of rooms, yards, and the entire premises. In fact, he, himself, should be an example of cleanliness and nearness ness and neatness.

One of the school's chief functions is to inculcate in the minds of the children a taste for neatness and cleanliness, and no one connected with the school has better opportunity to promote such standards by the force of good example than the

Children from homes where standards of house-keeping are high should not have them lowered at school, and the children from homes where housekeeping standards are too low, should be taught at school what correct standards are.

It is certain that the conditions under which the children live in school for five days a week for nine months a year and from eight to twelve years, have much to do with the establishment of their habits of cleanliness and order.

Moral Influence
The fact should be constantly borne in mind that we place in our school buildings, practically every citizen of the country at this most critical age, the age of not only the most rapid physical growth and

development, but the age when moral and intellectual standards are set up, and when character and ideals are formed.

The janitor who is custodian of these buildings comes in close and intimate association with teachers and children, affording daily opportunity for moral service, which must be tactfully and wisely performed.

The janitor is responsible for reporting misdemeanors and irregularities to teachers and principals, and his authority should cover general supervision at all times.

The position of school janitor, therefore, is not the place for a man of uncertain reputation or doubtful integrity.

Control of Health Conditions
It is recognized that the physical development of the child is fully as important as the mental development. Physical environment is a most important factor in the health and physical well-being of the child. The school officer who has the most direct and continuous charge and control of the physical environment of the school children is the inviter.

Cleanliness and air affect the health. The cleanliness and conditions of the air which the children have to breathe while in the building, its temperature, moisture, degree of dustiness, depend largely upon the janitor. In the last analysis, the sanitary condition in the school will be found to rest largely upon the efficiency and faithfulness of the janitor.

Fire Hazards and Safety
The last, but in no wise the least duty which devolves upon the janitor, is that of looking after the safety of life and limb of the children. He should promote good adventure among the children, but should discourage foolhardiness.

Perhaps the greatest danger to life and limb is

the liability of panic from fire or smoke; however, panic may result from lightning, windstorm, earth tremors or explosions. Often the very thing we think just could not happen, does happen.

It is the imperative duty of the janitor or custodian of the building to safeguard, or remove with-out notice, any and all probable causes for panic. Basements, attics, or closets under stairways never should be used for dead storage of any kind, as such material is usually only "fodder for fire" and creates an unnecessary safety liability.

A janitor is warranted, for many reasons, in

standing guard against anyone storing or attempt-

(Concluded on Page 82)

# The FINNELL

- 1. Waxes. Polishes. Scrubs. Oils.
- 2. Polishes wood, linoleum, rubber tile, etc., to lustrous beauty.
- Spreads a thin layer of wax automatically.
- Never leaves floor sticky or slippery.
- 5. Scrubs wood, concrete, terrazzo, tile, marble, rubber, cork, composition, mastic, magnesite, etc.
- Routs dirt, debris, and discoloration impossible to remove by hand.
- 7. Provides a constant supply of clean water.
- 8. Model shown covers many times as much floor area per hour as the strongest man.
- 9. Saves time, labor. Cuts cleaning costs in some cases as much as 60%!



# Let this machine renew your school floors

# during the holidays and save you money all the year 'round & & &

WE believe that educators and school board members will agree with us in this general observation:—that schools where floors are waxed, polished, and scrubbed regularly reflect, almost without exception, a higher moral tone, greater alertness, and optimism both of pupils and teachers.

In planning your Christmas vacation cleaning, you cannot afford to overlook the floors. In corridors, gymnasium, pool, cafeteria, classrooms, the opening of the second semester should find them immaculate. The value of

the FINNELL Electric Floor Machine in such a program is that it enables unskilled help to renew the floor surfaces easily and inexpensively. It refinishes worn spots. It waxes and polishes wood, linoleum, rubber, terrazzo, etc. It scrubs any floor far cleaner than is possible by hand. It can be used to oil and to dry-scrub oiled floors. A thorough going over with the FINNELL during the vacation will keep floors in excellent condition until next summer with a minimum of attention. This means not only an immediate saving, but a considerable reduction in floor -cleaning expense throughout the year.

In some instances, the FINNELL has reduced school floor cleaning costs by as much as 60%!

### A Few Facts About the FINNELL

The model shown above, number 17, covers many times as much floor area per hour as would the strongest man working to achieve the same results. It routs dirt from places impossible to reach by hand, and supplies a constant stream of clean water while scrubbing. It applies wax automatically, and never leaves the floor sticky or slippery after polishing. It cleans under stationary desks, tables, chairs, etc.

There are eight FINNELL models, to suit schools of every size. Several models are small enough to be easily transported by automobile and used for a group of schools. This reduces the immediate investment for each school. FINNELL upkeep is very low, and complete servicing by the factory goes with every machine.

# Write for Details and Free Estimate

It will pay you to investigate the FINNELL now. Let us explain how you can make your floors pay dividends—in reduced cleaning costs and improved school conditions. If you wish an estimate of equipment needed and possible saving, enclose description of floors, area, present maintenance cost. No obligation. Address FINNELL SYSTEM, INC., 611 East St., Elkhart, Ind. (Factories Elkhart, Ind., Hannibal, Mo., and Ottowa, Ont., Canada. District offices in principal cities of U. S. A.



FINNELL ELECTRIC FLOOR MACHINE

It waxes · · · It polishes

It oils

It scrubs

# Is your school building flexible?

IS IT EQUIPPED to care for all applicants for enrollment?

Can you add a new classroom without an extensive alteration?

Can you hold a general school assembly without an expensive auditorium?

Can you have small night meetings without holding them in large, poorly heated and lighted rooms?

In short, can you turn one room into many, or many into one?

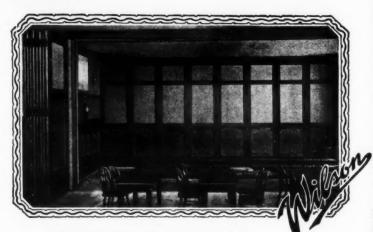
THE J. G. WILSON CORPORATION
11 East 38th Street, New York City
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Also Manufacturers of Rolling Partitions and Hygienic Wardrobes

OVER FIFTY YEARS IN BUSINESS

For nearly half a century, we have been helping schools do just this thing—make them more flexible with Sectionfold and Rolling Partitions.

We'll gladly tell you how, or send you a most interesting booklet No. 14 on the subject of making school buildings more flexible.



A flexible school in California. The chairs in the foreground are on the auditorium stage. Behind the closed partition is a row of class rooms. Note blackboards on partitions.

DOORS - PARTITIONS - BLINDS WARDROBES - THE JG WILSON CORPORATION HE WARDS CTTY

(Concluded from Page 80)

ing to store away any inflammable material in the basement, attic, or under a stairway in a school building, except in a room or compartment especially provided for such storage

especially provided for such storage.

There is no excuse for the accumulation of waste paper, oily rags, or rubbish outside the furnace.

Notwithstanding all these precautions, the janitor should be prepared at all times for an emergency. He should be skillful in the maintenance and use of first-aid appliances for fighting fire, and should instruct others about the building in their use.

He should know every day the number and conditions of the emergency exits, and he should also know that all the children or pupils are properly and frequently practiced in rapid dismissals, in order to avoid possible panic in case of an emergency exit.

Rapid dismissal should not be practiced simply because the state law or rules and regulations require it, but for the important reason for forming habits of conduct in an emergency school egress.

To this end there should be a whole hearted co-

To this end there should be a whole-hearted cooperation of the janitor, superintendent, principal, and teacher.

# COOPERATIVE PURCHASE OF SCHOOL SUPPLIES IN CALIFORNIA

Governor Young of California, during the past summer, signed assembly bill 819 which provides for the cooperative purchase of school supplies in the state. Under the new law, the county is the unit, the county board the legislative agency, and the county superintendent the executive agency in the purchase of supplies. The responsibility for the purchase of supplies is assumed by the county superintendent of schools, but in most cases, he delegates the county purchasing agent, who already buys for all other county institutions, to act for him. A factor which may operate to prevent the obtaining of the lowest possible price is a clause making participation by city boards optional. It is the large quantities used by the cities which is most effective in reducing costs of supplies to small districts.

In the operation of the law, it is possible there may be some lack of uniformity since there are 58 separate boards adopting rules and standards, but common factors will no doubt be developed through the exchange of experience. The law in substance is as follows:

On the first day of February, 1927, and on the first day of February of each ensuing year, the county board of education may establish rules and regulations whereby elementary-school districts governed by school trustees may purchase standard school supplies and equipment through the county superintendent of schools, or through a county purchasing agent. The county board of education must list as standard school supplies and equipment such supplies and equipment as may be advantageously purchased in quantity.

Trustees of elementary-school districts must purchase standard school supplies and equipment in accordance with the general regulations of the county board of education established under the provisions of section 1780 of the California political code.

City boards of education and high-school boards, if they so desire, may purchase standard school supplies and equipment as previously provided for the purchase of such supplies and equipment of elementary-school districts governed by school

School boards may purchase all necessary additional school supplies and equipment in the manner provided by law.

In accordance with the general rules and regulations prescribed by the county board of education under the provisions of section 1980 of the code, the county superintendent of schools has power,

and it is his duty, to provide for the purchase of all standard school supplies and equipment needed in the elementary districts of his county. It is also his duty, when so requested, to act as the agent for the purchase of supplies for the city and highschool districts of the county.

The county superintendent is authorized to arrange with the county purchasing agent for the purchase of standard school supplies and equipment in accordance with the regulations of the county board of education, and the purchasing agent is directed by law to act in such a capacity when so authorized.

—The teachers of Hobart, Indiana, were entertained recently by the board of education at the Joseph M. Mundell home.

—In comment on the school strike at Gary, Indiana, where the issue was over the temporary placement of a few dozen negro children, the Chicago Post says: "The most deplorable aspect of the incident lies in the fact that the students, too young to comprehend the full significance and implications of their action, were permitted, if not actually encouraged, by their parents to rebel against the properly constituted authorities and to take the situation into their own hands. This is hardly the way in which to instill into children the ideals of Americanism and good citizenship or to inculcate in them respect for law and order."



HIGH SCHOOL, WELLINGTON, KANS.

Schmidt, Boucher & Overend, Architects, Wichita, Kans.



# Truly an Automatic Safety Device

Wooster Safe-Groove Treads are easily and quickly installed on new or old stairs of any type of material. The treads may be furnished in steel base, yellow brass base or non-tarnishing white brass base. OOSTER SAFE-GROOVE TREADS are as truly automatic as any machine or device with moving parts which functions automatically. As a safety-device, Wooster Safe-Groove Treads work automatically without thought on the part of the user.

Matches, pencil stubs, elastic bands and other things which litter stairways, automatically drop into the deep, narrow grooves in Wooster Safe-Groove Treads and are held safely away from the foot. On stairs equipped with these treads the foot comes in contact only with the flat ridges of carborundum which wear slowly and evenly, giving many years of wear and protection against slipping accidents.

Wooster Safe-Groove Treads help to keep a building clean, too, because in wet or snowy weather the treads act as a foot scraper and prevent snow and mud from being tracked through corridors. The deep grooves are easily cleaned with one stroke of a broom and the walking surface is always clear.

THE SAFETY STAIR TREAD CO.
P.O. Box 198-C ... Wooster, Ohio

WOOSTER SAFE—GROOVE STAIR TREAD



# for

- Comfort,,, Cleanliness
- Health ....
  Efficiency ...
  - Economy
  - Beauty



# Floor with Maple

Pounding, scuffing feet cause no damage to a hard Maple floor. Maple is remarkably tough-fibred and tight-grained. It will not sliver, splinter or develop ridges. Friction simply makes it smoother with time. And because of this smoothness, Maple is the easiest of floors to keep clean.

This unique flooring, moreover, brings a new advantage never before possible in school floors. Color! Color to relieve the monotony of surroundings. Color to inspire the youthful mind to better work. By a marvelous new process, hard Maple can now be stained any one of a variety of beautiful finishes.

Hard Maple offers a warm, dry, cushioning effect beneath the feet. It provides a fine anchorage for desks. It imparts a cheerful, homelike atmosphere throughout the school. It is the ideal flooring for school use.

# New! Maple Floors in Color

By a scientific process recently developed, hard Maple Flooring is now made to take a variety of beautiful, lasting color finishes—opening up entirely new possibilities for attractive decorative effects. Standard finishes as follows:

EARLY AMERICAN, SPANISH BROWN, AUTUMN BROWN, SILVER GRAY, DOVE GRAY, ROYAL BLUE, PASTEL GREEN, ORCHID, SEAL BLACK, NATURAL

Write for fee booklet,"The New Color Enchantment in Hard Maple Floors"

Guaranteed Floorings

The letters MFMA on Maple, Beech or Birch flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing and grading rules which economically conserve these remarkable woods. This trade-mark is for your protection. Look for it on the flooring you use.

Let our Service and Research Department assist you with your flooring problems. Write us.

MAPLE FLOORING MANUFACTURERS ASSN 1780 McCormick Building Chicago



# All-Steel-Equip

ر برواناهی محاناهی محا

# Steel Book Racks

A -S-E sectional steel units which offer economical storage space for books and supplies represent a permanent investment. They are made in two convenient styles

— 12" depth (especially designed to hold books), and 18" depth for general storage. Both sizes are 34" wide and 77" high.

Each unit is complete with four shelves, adjustable on three-inch centers without the use of tools. These racks are finished in dark green baked enamel.



# All-Steel-Equip Company

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LOS ANGELES—800 N. Spring St.
MILWAUKEE—141 E. Wisconsin Ave.
DETROIT—231 Iron St.
TOLEDO—1825 Vermont Ave.

Our complete line of A-S-E cabinets and lockers will meet all storage needs. Write for Catalog C-25.

# BUILDING NEWS OF THE SCHOOLS

ADOPT STANDARDS FOR PLUMBING

FIXTURES

The American Engineering Standards Committee, in cooperation with the Division of Simplified Practice of the United States Department of Commerce, has taken steps toward the development of standards and specifications for plumbing fixtures with a view of overcoming the difficulties formerly experienced by the consumer in matching certain plumbing fixtures, and in purchasing repair parts for them.

The work will include materials, performance, and efficiency of devices, roughing-in dimensions, and other important technical items having direct bearing upon the service and economy afforded the consumer.

The work of standardization will begin with a few of the more simple items which are more particularly in need of attention, such as faucets, washers, and other small parts. The work will then be extended to the more difficult and technical

A BUILDING-EXITS CODE

The American Engineering Standards Committee has recently given its final approval to a Building-Exits Code prepared by a special committee under the sponsorship of the National Fire Protection Association. The purpose of this Code is to specify exits sufficient to empty buildings promptly in case of fire or other emergency, and to provide for construction and protection so that there will be no danger to life from fire, smoke, or resulting panic before a building is emptied.

before a building is emptied.

An important section of the Code is devoted to exits of school buildings. In the development of this part of the Code the Committee had the service of experts in schoolhouse planning and construction representing the American Institute of Architects, the Association of Public School Business Officials, and other school organizations.

SCHOOL BUILDING NEWS

—The building bureau of the New York City
board of education has reported that the number

of sittings under contract is continuing to increase.

On September 1 there were under contract 40.141.

while on August 1 there were 35,832. In September, 1926, there were 31,677 sittings under contract. With the opening of the schools, over 10,000 of the sittings have been occupied. At its last meeting the board awarded contracts for 2,813 more sittings.

##**ֈֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈ**ֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟֎֍ֈֈ֎՟

In September the bureau reported a decrease in the number of school-building plans under preparation. On the first of the month there were new buildings planned for 39,897 sittings, as compared with 48,897 in July, and 47,235 in August.

The bureau has reported that revised plans for the new Brooklyn Trade School for Girls are ready, and that the plans for the proposed Bronx Vocational School for Boys are awaiting shop layouts. Plans have been approved for two new schools but contracts have been held up.

—Kenosha, Wis. Construction work has been begun on the new Roosevelt School, which is to be completed during the year 1928. The building will contain 24 rooms and will be erected at a cost of \$300,000.

—A standard elementary school recently erected in Chicago has been named the Samuel Gompers School. The school contains seventeen classrooms, nine special study rooms, a library, a gymnasium, and an assembly hall. It accommodates 816 children and was erected at a cost of \$500,000. At the dedication of the building, a bronze memorial tablet was presented by the Calumet Labor Council and the South Chicago Trades and Labor Assembly.

—Sacramento, Calif. In keeping with its policy to perpetuate the memory of early pioneers in California, the board of education of Sacramento has named a new school after Theodore D. Judah, who was responsible for the early planning of the Central Pacific railroad over the Sierras. The school now consists of two bungalows designed for temporary needs but will be replaced later with a permanent modern building.

—The city council of Buffalo, New York, was asked on September 21, to approve a bond issue of \$3,880,000 for the construction of new schools during the next year. The school department has on hand \$1,500,000 for school construction purposes, but this will be exhausted before the end of the year.

The largest items in the building program include the purchase of sites and the construction of buildings for the Black Rock High School, several new primary schools, and equipment for the Peckham and Seneca Vocational Schools. The former

will cost \$500,000, while the equipment for the two vocational schools will cost \$320,000.

—The school children of St. Joseph, Missouri, have raised over \$1,000 toward the erection of the first unit of a public museum. A campaign will be started to bring the amount up to \$50,000 so that construction work may be begun.

—Plans for three new elementary school buildings in New York City providing 3,175 sittings, have been approved by the board of education. The estimated cost of the three schools, with equipment, is placed at \$1,640,425. Of the schools, one will be a 33-unit building of the standard "M" type, while the other two will be of the 22-unit three-story "M" type. In addition to these, revised plans have been submitted for the Seward Park High School which is to contain 47 classrooms and accommodate 2,800 pupils.

—New York, N. Y. It costs the city nearly five million dollars a year to employ custodians, janitors, cleaners, firemen, and stokers, to take care of the nearly 1,000 school buildings used by the board of education, according to a budget estimate for the year 1928.

—Akron, Ohio. At the November election the school patrons will decide if the school program is to be held to the present schedule or is to be expanded through increased finances.

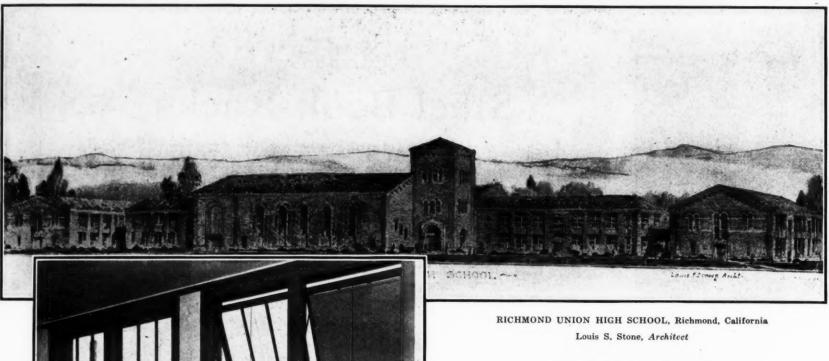
—Hamilton, Ohio. A bond issue of \$1,500,000 has been proposed for the erection of new school buildings. Of this amount, \$1,150,000 will be used for buildings, and \$150,000 for equipment.

—Cleveland, Ohio. The school board's request for \$1,500,000 at the hands of the voters in November may meet an obstruction because of the adverse report of the citizens' advisory committee. The board has been asked to use funds intended for the Hay school, for the four elementary schools contemplated in the bond issue.

—Dayton, Ohio. The voters have been asked to approve a one-mill levy for school-building purposes at the November election. With a two-mill levy it is planned to use one mill for general maintenance and the other for building purposes.

—Raytown, Mo. A high school has been erected at a cost of \$62,000.

—Indianapolis, Ind. The school board has adopted a budget calling for an appropriation of \$1,380,000 for four new grade schools and additions to three more. An appropriation of \$248,305 has



# DONOVAN Universal Windows AWNING TYPE

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### UNIVERSAL WINDOW COMPANY

General Sales Office—1916 Broadway OAKLAND **CALIFORNIA** 

been provided for building repairs and alterations

to elementary schools.

—Bath, Mich. A total of \$72,000 has been collected for rebuilding the Bath Memorial School and construction work will begin in a short time. Mr. Warren Holmes, architect, Lansing, Michigan, is giving his services gratis in the construction of the

—South Bend, Ind. The board of education is planning to erect a new elementary school near the Riley building to relieve that building and to permit the establishment of senior high-school classes in that district.

-The board of education of San Francisco, Calif., has taken steps toward the opening of its building program. The program calls for an expenditure of \$2,100,000 for new schools.

—Springfield, Mo. The school board has taken

the initial steps to modernize the school plant with the decision to employ an architect to make a survey of each building. The survey will show the real needs of the schools and will offer estimates

of cost of the work.

—Seattle, Wash. The present school-building program of the board, which contemplates an expenditure of \$2,400,000 for new buildings, has progressed favorably. With the opening of the new school term in September two buildings have been occupied, namely, the Marshall intermediate school and the Magnolia grade school. At present, work is progressing on the Cleveland-high-school and the addition to the Jefferson elementary school. The contract has been awarded for the erection of an addition to the Whittier school, while bids have been received on the Laurelhurst school. The next building on the list will be a new intermediate school in West Seattle, which has a school plant comprising eight elementary schools and one high school.

-Alameda, Calif. A new million-and-a-quarterdollar high school was completed during the last

-The board of education of Holton, Kansas, has wall and stadium seats. The stadium was erected at a cost of \$5,000.

-Minneapolis, Minn. The board of education has asked the city board of estimate to Issue and sell in 1927 municipal bonds to the amount of \$2,667,635, the bonds to be sold for the use of the board in the construction and equipment of school buildings and additions, and for the acquisition of school sites.

-Sacramento, Calif. The board of education has ordered that a survey be made of the building needs of the schools with a view of providing the necessary schoolhouses and rooms. The survey is preliminary to a bond-issue election which the board will call after the exact requirements have been determined.

It is pointed out that the population of the city has grown from 60,000 to 110,000 in ten years' time with the result that there has been severe congestion in the schools. Today the schools of the city are using about 100 bungalows and the com-(Concluded on Page 88)



FRANKLINVILLE, N. Y.—Here is shown the old checkered schoolhouse which is perhaps the oldest school in this section and at the same time one of the most unique schoolhouses in the country. Legend has it that when the school was built in 1841, the townsfolk quarreled regarding the color to be used in painting the school. A special election was held, and those who voted to paint the school white won the election. But during the night the supporters of red paint visited the school and painted the checks of red over the white. The whites took the prank in good humor and the school has had a checkered career since. (International Newsreel.) (International Newsreel.)

# The NATION'S BUILDING STONE

# Learn What Other Communities Have Done

Write for free booklet showing examples of modern school structures

YOU want your new building to be ideal from every standpoint, and yet it must stand keen scrutiny from the business men of your community who may be indifferent to the things that seem of first importance to you.

Our booklet, "Indiana Limestone for School and College Buildings," shows not two or three but *dozens* of examples of modern school buildings in all parts of the country. It is a book of facts which will enable you to profit from the experience of others and which will give you a precedent for the school structures that you are planning.

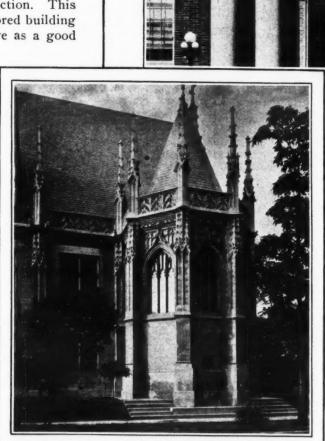
The business world knows and endorses Indiana Limestone construction. This dense, fine-grained, light-colored building stone is regarded everywhere as a good

investment because of its permanent attractiveness and low upkeep cost.

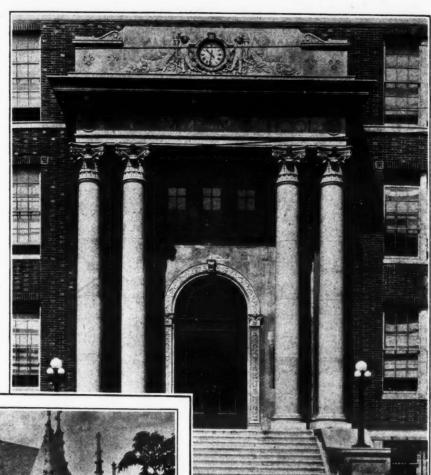
Indiana Limestone is generally considered the standard trim for brick school buildings. Its light tone harmonizes by contrast with the darker tones of brick, giving striking beauty to the buildings in which it is used.

Whether you use Indiana Limestone as trim or as facing for the entire building, you will be assured of a building of extraordinary beauty.

New methods of producing and using Indiana Limestone have greatly reduced its cost. As a result many school buildings, like college structures the country over, are now built with walls faced entirely with



Detail St. Edmond's School, Chicago. H. J. Schlacks, Architect. Built of Variegated Indiana Limestone from the quarries of the Indiana Limestone Company.



Entrance, Washington High School, Union Hill, N. J. Mayer & Mahnken, Architects.

Indiana Limestone. The low upkeep cost of such exteriors is a factor of decided importance in any civic building.

### For Special Booklet

Just send us your name and address and we will gladly send a copy of the booklet showing modern school buildings of Indiana Limestone. Address Box 780, Service Bureau, Indiana Limestone Company, Bedford, Indiana.



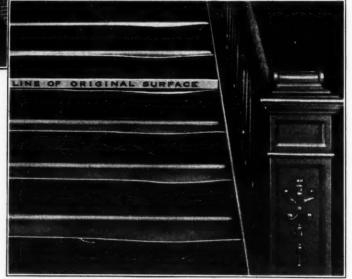


# FERALUN Anti-Slip Treads

# A SYMBOL OF SAFETY

ABOVE — A typical FERALUN installation showing a slip-proof stairway. FERALUN Stair Treads can always be counted on to carry the heaviest traffic SAFELY—whether it is ordinary usage or a case of emergency.

RIGHT — A school stairway that is a menace to life. Worn, slippery, and unprotected, these steps might easily cause bad accidents to students and even start a panic in case of fire.



If you have let the question of stairway repairs slip by for some time you should make a check-up without further delay. Worn and unprotected stairs can be easily repaired with Feralun Anti-Slip Treads and once they are laid your stairway problems will be eliminated since FERALUN will probably outlast the building.

Slip-proof stairs are essential for the protection of children's lives and your first repair problem is a check-up on the stairs and steps in your schools.

Write for Detail Sheets of Feralun Style "S" Structural Treads.

# AMERICAN ABRASIVE METALS CO.

50 Church Street, New York

BOSTON

PHILADELPHIA 1700 Walnut Street CHICAGO Conway Building BUFFALO

PITTSBURGH Farmers Bank Building SAN FRANCISCO

(Concluded from Page 86) panion class plan successfully in combating the lack of available classrooms.

—Buffalo, N. Y. The new East High School was opened for the first time in September. The board has recently awarded contracts for additions to School No. 51 and School No. 9.

—New York, N. Y. Because of congestion in elementary schools in certain localities, the board of education has given permission to sixteen principals of schools in the Boroughs of Brooklyn, Queens, and Bronx to place a total of 136 classes on short-time instruction. The most overcrowded school is Public School 77, Bronx, which has been allowed to place 43 of its classes on short-time sessions. The board has provided for additional classrooms by making alterations in the schools and erecting partitions in the larger rooms.

erecting partitions in the larger rooms.

—New York, N. Y. The school board has approved plans for one new high school and two elementary schools. The high school will be known as the Samuel Tilden High School and will be erected at a cost of \$1,847,000. It will be three stories in height and will have accommodations for 3,696 boys

and girls. Architect William H. Gompert of the New York City board of education has submitted two reports to the school authorities denying in full the charges made by Acting Mayor McKee of faulty and unsafe construction work on the DeWitt Clinton and Theodore Roosevelt High Schools now being erected in Bronx Borough. Mr. Gompert's report has been borne out by the reports of two committees of prominent engineers and architects who inspected the schools. As a result of his findings the board has ordered the contractors paid for the work performed to date and has asked that the work be resumed immediately. In answering the criticism of Mr. McKee, Mr. Gompert reported that independent investigations by himself and several prominent foundation experts in the city had shown the foundations to be "safe and substantially built in every way and there is no element of danger.' Among the experts who made the investigation were Mr. D. Everett Waid, chairman of the building committee of the American Institute of Architects, and Mr. S. R. Bishop, member of the structural service department of the American Institute of Architects.

—Worcester, Mass. During the past year a total of 48 new schoolrooms have been provided for the accommodation of 1,920 pupils. This is the largest annual program ever attempted by the Worcester school system. Plans have been prepared for an addition to the High School of Commerce, which is to cost about \$500,000.

—Harrisonburg, Va. The board of education has awarded the contract for the erection of the first unit of a high school, to cost \$225,000. The building will occupy a site of thirty acres, and will cost, when complete, a total of \$400,000. It will be erected from plans prepared by Mr. Charles M. Robinson of Richmond.

—Waukegan, Ill. Mr. M. L. Miller, a building contractor, has brought suit through an attorney, to recover damages of \$16,000 from the board of education. Mr. Miller charges that he was wrongfully deprived of a contract for the erection of a school building although the bid was filed at the



THE RED CROSS MAKES AN APPEAL FOR JUNIOR MEMBERSHIP ON THE TENTH ANNIVERSARY OF THE ESTABLISHMENT OF ITS JUNIOR SECTION.

proper time and was \$5,000 below that of the next lowest bidder, the Advance Builders, who were given the contract. The board of education refused to honor the bid of Miller on the ground that he was not a responsible bidder.

—Jackson, Miss. Two additional elementary schools have been erected at an approximate cost of \$100,000. The buildings have been named the Henry Whitfield School and the Lorena Duling School.

—A \$2,000 playground will be provided for Garden City, Kansas, through the aid of the Harmon Foundation of New York City. The Foundation has a sum available in 1927 for 23 playground sites at a cost of \$2,000 each.

—Natchez, Miss. The school board has begun the erection of a modern high school. The building is being erected from plans prepared by Architect P. J. Krouse of Meridian, Miss., with the advice and help of Dr. F. B. Dresslar of Peabody College. The erection of this building completes the building program begun by the board four years ago.

—The school board of Helena, Mont., has placed the school levy at 2014 mills, reducing it from 2214 mills which had been recommended by the county superintendent.

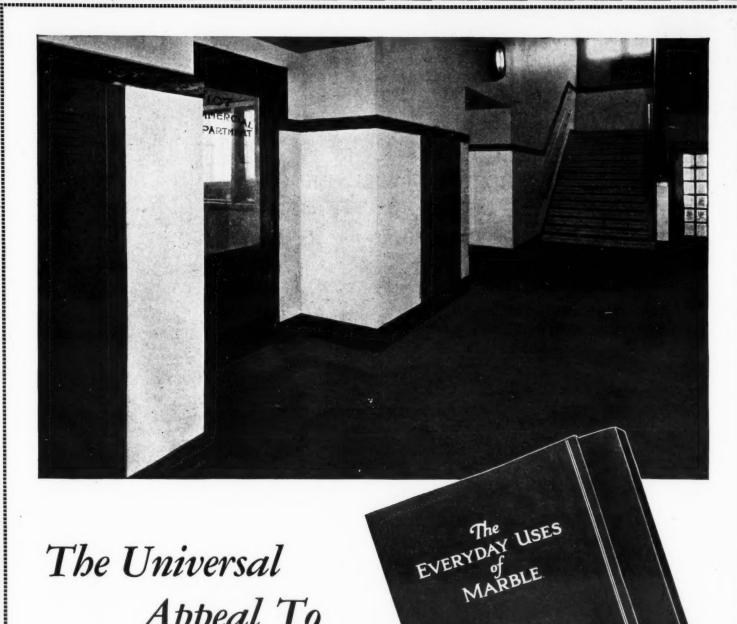
—By a vote of two to one a \$200,000 bond issue for a new high-school unit was defeated at Prescott, Ariz.

# SCHOOL BONDS AND BUILDING CONSTRUCTION

The total sale of school bonds for September, 1927, amounts to \$30,869,480, or more than twice the amount (\$12,875,224) sold in September, 1926. During the past month, contracts were let for 313 projects, covering an area of 4,263,700 square feet, as compared with the 349 projects, covering an area of 4,865,100 square feet, for September, 1926.

The school-bond sales for July, August, and September, 1927, total \$71,610,696, or an increase of 16 per cent over the same quarter of last year, which amounted to \$59,762,572. During the third quarter of this year, contracts were let for 1,532 projects, or an 8-per-cent gain over the 1,406 projects for the same months of last year, with a loss of 10 per cent on the area of 106,712,500 square feet as compared with last year's area of 118,671,400 square feet.

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Of all materials for the interior finish of buildings, marble is the recognized medium—universally for the expression of that distinction inherent in treatments of better character. This condition is conceded.

Moreover, such usage is not confined to any particular type of building; rather, marble is equally adapted to commercial, civic and residential architecture alike-from that of mere modesty to ornate pretentiousness.

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FOR MANY YEARS WE HAVE SPECIALIZED IN BONDS OF SCHOOL DISTRICTS. UNUSUAL PROBLEMS WILL BE GIVEN OUR BEST ATTENTION.

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FIRST NATIONAL BANK BLDG. **CHICAGO** 

**EQUITABLE BUILDING NEW YORK** 

# SCHOOL FINANCE

# IMPORTANT SCHOOL-BOND SALES OF THE

Connecticut—Bridgeport, School         \$ 450,000           Indiana—Gary, School District         300,000           Kentucky—Louisville, School         1,000,000           Massachusetts—Newton, School         250,000           Massachusetts—Salem, High-School Addition         270,000           Massachusetts—Somerville, High-School Additions and Alterations         700,000           Massachusetts—Somerville, High-School Additions and Alterations         300,000           Michigan—Detroit, Schools         4,000,000           New York—Mt. Vernon, School         884,500           New York—New York, Construction of Schools         1,750,000           New York—New York, Construction Purposes         4,100,000           New York—North Hempstead, Union Free School District No. 4         750,000           North Carolina—Sampson Co., School Building         300,000           Orio—Akron, School District         300,000           Oregon—Multnomah Co., School District         80,000           No. 1         608,000           Oregon—Multnomah Co., School District         300,000           Rhode Island—Rhode Island College of Education         660,000           Rhode Island—Rhode Island State College         660,000           Tennessee—Memphis         750,000           Virginia—Roanoke, School         750,000<	PAST MONTH
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## A PROBLEM IN SCHOOL FINANCE

The city of North Bergen, N. J., is a suburb of New York City and adjoins a number of prosperous industrial and commercial cities. It is purely a residential community and is practically without

a business center. This situation is a drawback to the school system, according to Supt. M. F. Husted, who writes in a recent report:

"Unfortunately for North Bergen, we have no business center to make high valuations for taxable purposes, but our people greatly and continually contribute to our neighbors' revenues and valuations. Our neighboring municipalities have the mercantile buildings, banks, lawyers, doctors, and dentists' offices, real-estate and automobile agencies, theaters, fraternal buildings, restaurants, which North Bergen helps to support. While North Bergen contributes so much to the economic development of our neighbors, we are so near New York City that we are continually receiving a population that swells our school enrollment and keeps the need for school buildings ahead of the necessary

valuations for erecting them."
Per-Capita Cost of Day Schools Increases in

Baltimore

—The latest report of the board of school commissioners of Baltimore, Maryland, shows that the total per-capita cost of the day schools for the year 1925-26 amounted to \$90,865, or an increase of \$2 over the total cost for day schools in 1923-24. The per-capita cost of elementary and junior high schools increased only a few cents, while that of the vocational schools decreased by \$15.98.

The cost of educating a pupil in the senior high school was \$138.63, or an increase of \$14.28 per pupil, while the average net roll was less by 276.

The total operating cost per capita in the day schools amounted to \$75.491, while the capital outlay cost was \$15.374. Instructional service was lay cost was \$15.374. Instructional service was the most expensive of the six items of cost, amounting to \$58.560, while the smallest was fixed charges, amounting to \$0.363.

FINANCE AND TAXATION

—The Marion, Nebr., board of education has fixed its budget for 1928 on the tax rate of \$1.22, same

—The board of education of Nebraska City, Nebr., has fixed the school levy for next year at 13½ mills. Of this 11½ mills will go for general purposes and 2 mills for interest and retirement of bonds.

—A tax levy of \$1.03 has been adopted by the school board of Evansville, Indiana.

-For the first time in twenty years the school funds of Bradley county, Tennessee, are not over-drawn. The last of an old debt, \$5,000, which amounted to \$114,000, has been paid.

-The expenditures of the Cleveland, Ohio, board of education have jumped from \$1,402,956 in 1900 to \$20,265,969 in 1927. A citizens' bulletin attacks the expenditures by saying: "The figures for the later years show that the school board has squandered the taxpayer's money with reckless abandon never before known in Cleveland. Why? For years For years we have heard from school teachers and their ally, the uplifter, both hired and amateur, that the dollars collected in the name of education are sacrosanct and their expenditure must not be questioned. The school board hasn't a dollar that is not taken out of the pocket of some taxpayer, and it is high time that the taxpayer undertook to see that he gets value for it," the bulletin concludes.

-The Dayton, Ohio, board of education has estimated its budget for 1928 at \$3,815,675, according to C. J. Schmidt, clerk-treasurer. The board hopes to obtain \$2,695,675 from the local levy, \$910,000 from the 2.65 mills levy of the state, \$90,000 from miscellaneous sources, \$70,000 from school lunchrooms, and \$50,000 from textbooks.

-Dubuque, Iowa. With the opening of the new school year, the school board is receiving regular monthly reports from the secretary concerning the condition of the budget. The change is the result of the adoption of a new form of budgeting, which makes it possible to show the amount allowed for each classification, the amount expended under each, and the balance remaining in the several classifications up to the time of the making of the report.

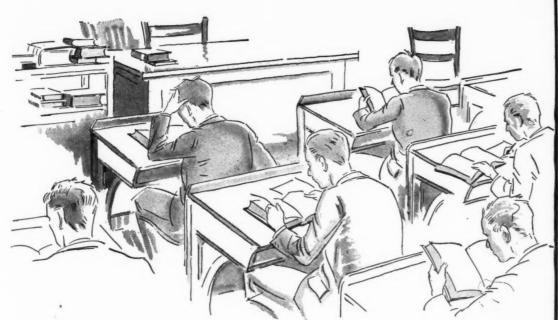
—San Diego, Calif. The school board has adopted a plan whereby school authorities have supervision of the money collected by the different school units. Under a plan adopted for handling these funds, a treasurer will take care of the funds in each school, this official to be directly responsible to the principal. An audit of the books will be made by the business manager each year.

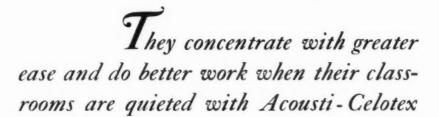
-Dallas, Texas. Principals of the schools have been asked to devise ways in which the cost of operation and maintenance may be reduced during the present se

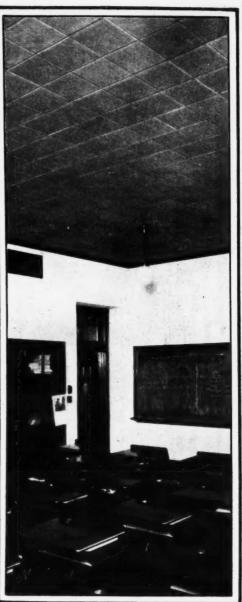
-The budget estimate of the board of education calls for an appropriation of \$708,108 for the operation of the schools. The salary estimate shows an increase of \$13,385 which is due to the operation of a new salary schedule.

(Continued on Page 92)

# Protect your students from disturbing noises







In this classroom students are enabled to concentrate because Acousti-Celotex keeps the room free from disturbing noises. L. C. Humes High School, Memphis, Tenn. Pfeil and Awsumb, Architects; Ryan Sales Company, Acousti-Celotex Contractor

NOISE does more than merely disturb students. It uses up valuable energy . . . induces early fatigue. Noise lowers the quality of school-work students are able to do, as well as the quantity. And echoing noises in school auditoriums greatly decrease the worth and enjoyment of programs.

School authorities everywhere are protecting their students from noise with Acousti-Celotex. This material has remarkable sound-absorbing qualities. It creates quiet by the simple process of swallowing up distracting noises and echoes. And since it comes from the factory in

finished, complete units, its application is simple.

You can paint Acousti-Celotex without destroying its sound-quieting efficiency. This is because the sound absorbing qualities of Acousti-Celotex are built-in. And it is easily installed in any building—new or old. No finishing processes are necessary.

Acousti-Celotex now is being used in school auditoriums, classrooms, shops, corridors, gymnasiums, chapels, cafeterias, band and chorus rooms. Besides quieting noise,

Acousti-Celotex lends itself to attractive decorative schemes.

Write now, for the new Acousti-Celotex book. Learn how schools everywhere are using this remarkable unit sound-absorber. If there are questions on which you would like further information, The Celotex Company will gladly have its nearest representative call on you.

THE CELOTEX COMPANY, Chicago, Illinois Mills: New Orleans, Louisiana

Branch Sales Offices in many principal cities (See telephone books for addresses)

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# DAKITE

Industrial Cleaning Materials and Methods

(Continued from Page 90)

-Cranston, R. I. The municipal authorities have asked the school board to make a reduction in the budget in order to meet a threatened finan-cial crisis. The school board had increased its

budget nearly to the half-million-dollar mark.

—Bemidji, Minn. The school board has adopted a budget of \$160,000, which is a reduction of \$18,-000 over that of 1926-27. The school levy has been fixed at \$110,000, which is \$5,000 less than that for the last year. The reduction in the budget for the year has been attributed to the interest and

bond items and to savings on coal and water.

—Lincoln, Nebr. The school board has revised its budget incorporating an actual balance of \$407,924 in place of the \$184,500 previously estimated. The new budget involves transfers recommended by the auditors and provides that the sur-plus from the balance be carried forward and distributed among the various funds.

-Cadillac, Mich. The school board has adopted a budget of \$155,000 for the school year 1927-28. The total is \$12,000 less than the amount appropriated last year for the current terms.

—Lansing, Mich. The school board has adopted a budget of \$1,281,896 for the operation and upkeep of the schools during the ensuing year. The largest items in the budget were for expenses of instruction, operation of the school plant, capital outlay, and auxiliary service.

-Racine, Wis. The school board has adopted a budget calling for an expenditure of \$1,292,689 for 1928, which includes the sum of \$1.075,222 to be raised by taxation.

-The Detroit Bureau of Governmental Research. Detroit, Michigan, has issued a report on the city's bonded indebtedness, showing that the total gross bonded debt for the year ending June 30, 1927. was \$218,810,230. This debt is offset by a sinking fund of \$17.425,325, giving a total net indebtedness of \$201,384,905. Based on an estimated population of 1,429,271, the city has a net per capita debt of \$142. In addition to the bonded debt, the city has In addition to the bonded a special assessment debt of \$19.516.145, which is fully offset by accounts levied but not due on property benefited by local improvements.

In the matter of school bonds, the city has gross outstanding bonds amounting to \$59.667.850, which with \$6,349,596 subtracted as a sinking fund, leaves

a balance of \$53,318,253. The amount of school bonds issued from January, 1891, to June, 1927, amounted to \$59,369,500, of which \$7,234,000 have matured up to June, 1927. The total of bonds outstanding for schools is \$52,135,050, of which \$3,000,000 were issued last year.

The state of Georgia will have an equalization fund of one million dollars a year for the years of 1928 and 1929. This revenue is to be derived from a one-half cent tax on each gallon of gasoline and a tax of one cent on each gallon of kerosene. If the revenue from these two taxes does not yield a million dollars the balance will be supplied out of the general treasury. All revenue from these two taxes will be used as an equalization fund even though it should exceed one million dollars.

New York, N. Y. At a recent conference of the city board of estimate relative to the school budget, it was decided to cut more than \$1,000,000 from the estimate of the school board. The school board voiced no opposition to the reduction but stated it would abide by the decision and endeavor to operate the schools with the reduced appropriation.

The reductions in the budget bring the increase in the city's share in the budget to the lowest sum in many years, \$615,855. Two years ago the increase over the previous year was \$3,723,215, while the city's share of the budget last year increased \$2,055,576 over the budget of the preceding year.

The city's share of the record school budget estimate for next year as reduced will be \$84,320,300. and that of the state will be \$40,197,681, bringing the total tax budget levy appropriation for the year 1927 to \$124,525,981, as compared with a total appropriation for the year 1927 of \$107.519,400. Of the total increase of \$17,006,581, \$14,000,000 has been reserved for the revision of the teachers'

-The Georgia state legislature has provided in its appropriation bill \$1,000,000 each for the years 1928 and 1929 as an equalization fund to be used for the purpose of equalizing educational oppor-tunities in the several counties of the state. Under the rules, no county nor independent system may share in the equalization fund for any year unless it levies at least five mills for local tax for the public schools for that year. Under a reenactment of the Barrett-Rodgers law, the Georgia department of education is authorized to set aside from the general appropriation for common schools the sum

of \$400,000 for the year 1928, and the years to follow.

-The gross cost of public education in Baltimore, Maryland, for the academic year 1925-26 was \$9,196,374, according to a recent report. Of this sum, \$7,313,370 was expended by the board and the balance by other city departments for services chargeable to the schools. Compared with the last year, there was an increase of five per cent in gross expenditures and three per cent in operating expenditures. There was only a slight increase in maintenance charges and very little change in the distribution of the educational dollar for the vari-cus objects of expense. The public-improvement commission expended \$2,349,300 for land and new buildings in process of erection.

The average cost per pupil for conducting the public day schools was \$75.45, an increase of \$2 over the previous year. This increase was due to a large per-pupil cost in the senior high schools and the colored training school. The per-capita cost of evening schools amounted to \$10.08, which was an increase of \$2.51 over last year. The increase resulted in part from an expansion of the crease resulted in part from an expansion of the curriculum of the evening and vocational schools, in part from the greater length of the school term, and in part from a change in the method of keeping the school accounts.

—Lima, Ohio. The school board has approved a budget of \$919,073 for 1928. A reduction of \$19,000 in the bond fund over the total for last year is noted. Maturing bonds for next year will require \$140,238 as compared to \$159,000 this year.

—Mt. Gilead, Ohio. A budget totaling \$42,000 has been adopted by the school board for 1928.

—Fort Worth, Texas. The school board has adopted a budget of \$2,063,235 for the operation of the schools during the year 1927-28.

-The school board of South Bend. Ind., has adopted a school-tax levy of \$1.15 for the school year 1927-28, which is an increase of 4 cents over

-Hammond, Ind. The school budget for the year 1927-28 shows an increase of \$87,000 over last year. The largest single item in the budget is that for teachers' salaries which is a little more than \$500,000. The board will retire over \$100,000 worth of bonds during the next year.

New Orleans, La. The school board of Orleans

Parish has adopted a budget calling for an expendi-(Concluded on Page 95)



Lessons + + + even in its plastered walls and ceilings











T Cleveland's West Tech, the largest technical high school in America, engineering truth is manifested even in the plastered walls and ceilings.

The original building was constructed in 1912. Walls and ceilings, were, with few exceptions, directly plastered over concrete. Plaster failure commenced within a year and continued until 1922, when the ceilings of concrete and tile construction were stripped, as well as some of the walls, and replastered after Par-Lock application.

Meantime in 1922 the lesson had been applied in the new section of the building, whose walls and ceilings were uniformly Par-Locked before plastering.

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751 South Cassingham Rd.
DETROIT.
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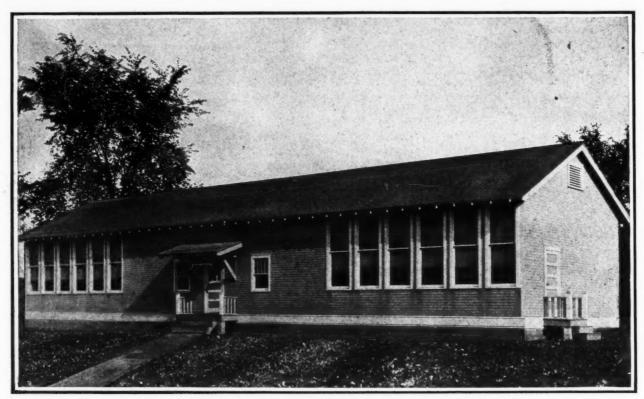
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Togan standard one, two, three and four-room schools provide adequate school housing facilities to meet the needs of both small and large communities. Alternate plans permit suitable arrangements for individual requirements.

Built by an organization of broad experience, Togan schools are fundamentally correct in every way and conform to all State School Building Codes. As contrasted with the local carpenter-built method, you know in advance how a Togan will look, how much it

will cost and when it will be ready for occupancy.

If desired, an experienced representative from the factory will supervise the erection. He will assume the entire burden and turn over the building ready for use within a few days. Why be satisfied with less when a Togan with its many advantages costs no more? Write today for the new Togan School Catalog.

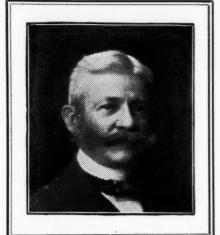


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# Holden Repairing Materials

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So that Instant Repairs can be made as soon as Damage Occurs.

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SAMPLES FREE

# HOLDEN PATENT BOOK COVER COMPANY

Miles C. Holden, President

Springfield, Massachusetts

(Concluded from Page 92)

ture of \$4,635,863. The main feature of the budget is the item of teachers' salaries which calls for an appropriation of \$3,034,000, or an increase of

appropriation of \$3,034,000, or an increase of \$119,000 over last year.

—Logansport, Ind. The school board has adopted a tax levy of \$1.5025 on the taxable property of the city, which amounts to \$22,092,150.

—Springfield, Mo. The Southern Missouri Trust Company has been named as depository for the school funds during the next two years.

—Battle Creek, Mich. The school board has adopted a hydget of \$907 112 for the school year.

adopted a budget of \$907,112 for the school year 1927-28,

1927-28.

—Elyria, Ohio. The budget of the schools for the year 1927-28 has been fixed at \$462,000.

—Madison, Wis. The board of education has asked for an appropriation of \$1,130,395 for the operation and maintenance of the schools in 1927-28. This is an increase of \$97,959 over last year. The largest increase is \$41,686 for salaries

of teachers and principals.

—Racine, Wis. A budget of more than \$1,000,000 has been adopted for the schools during the next has been adopted for the schools during the next year. The new budget represents an increase of \$75,000 over last year, and includes the cost of equipping the new Washington Park and William Horlick High Schools.

—Fremont, Mich. The school board has adopted the budget for the school year, by making a tax levy of \$37,000, the same as was raised last year.

—Superior, Wis. The school board has planned a budget of \$713,000, which is an increase of more than \$5,000 over last year.

—The heard of education of Cleveland Ohio pro-

—The board of education of Cleveland, Ohio, proposes to launch a \$3,000,000 bond issue for a school-administration building. It is believed that \$2,430,000 will be needed for actual construction of the building; \$200,000 for equipment; \$157,824 for architectural costs, and \$211,776 for miscellaneous and emergencies.

-A tentative budget of \$1,123,202 for 1928 was approved by the board of education of Springfield, Ohio. Included in the budget is \$45,000 for the Warder Public Library, and \$178,072 for bond, interest and sinking fund, the remainder being for operating expenses of the schools.

The amounts proposed for various funds follow: General fund, \$24,200; instruction, \$674,500; coordinate activities, \$8,000; school libraries, \$300; transportation of pupils, \$2,900; public lunches, \$1,200; other auxiliary agencies, \$26,425; operation

of school plant, \$112,640; maintenance of school

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of school plant, \$112,640; maintenance of school plant, \$6,050; permanent improvements, \$13,990; other expenses, \$30,100.

—The mayor of Detroit, Mich., blames the board of education for high taxes. He recently vetoed an appropriation for a teachers' college and appeared in person before the board to plead for economy. He holds that all the children should be provided with the board sets before the board sets before the sets of the se with school seats before a teachers' college, costing millions, is built.



# CHICAGO ADOPTS RULES FOR THE OPERATION OF SCHOOL PLANT

Pursuant to a decision of the courts of Illinois, the Chicago board of education has repealed all rules pertaining to engineer-custodians and their duties and has adopted new rules which read as follows:

follows:

Sec. 1. (General duties.) The bureau of operative engineering shall have general charge and control of the operation of the school plants, with power to provide for all emergency repairs necessary to maintain plants in operation, and shall have supervision and control over all employees of the board of education engaged in lines of work connected with the heating, ventilating and cleaning of school buildings and grounds. It shall also prepare all specifications for fuel used in the school system.

Sec. 2. (Chief engineer.) The chief engineer shall have charge and control, under the business manager, of the bureau of operative engineering, and of all the employees therein.

Sec. 3. (School-plant superintendent.) Each school plant shall be under the general charge and supervision of a school-plant superintendent who shall be a licensed stationary engineer. He shall be appointed pursuant to the civil-service law, and shall perform the duties required for the supervision, maintenance and operation of the school plant to which he is assigned, and shall perform such of the work as may be required by the chief engineer, and shall superintend and supervise all employees of the board of education who may be employed to assist him in his duties.

Sec. 4. (Assistant school-plant superintendents, stationary firemen, janitors, janitresses, fireman\_jani-

Sec. 4. (Assistant school-plant superintendents, stationary firemen, janitors, janitresses, fireman-janitors, janitor-firemen, window washers—hours of em-

ployment.)
Wherever necessary there shall be assigned to the various schools the following:
Assistant school-plant superintendents
Stationary firemen

Janitresses

Fireman-janitors
Janitor-firemen
Window washers
all pursuant to the civil-service law.
(Assistant school-plant superintendent.) Wherever in the judgment of the chief engineer such assignment shall be necessary, an assistant school-plant superintendent shall be appointed to perform duties similar to those of the school-plant superintendent, but under his direction and at such periods as may be determined by the chief engineer. He must be a licensed engineer and his hours of duty shall be 48 hours per week.

his direction and at such periods as may be determined by the chief engineer. He must be a licensed engineer and his hours of duty shall be 48 hours per week.

(Stationary firemen.) The duties of stationary firemen shall be that of boiler-room work, operating, working and tending to boilers and furnaces and performing such other duties as may be required in and about the boiler room. Stationary firemen shall be on duty 48 hours per week, and shall not be employed for less than three months per year, except in cases of emergency.

(Janitors and janitresses.) Janitors and janitresses shall be charged with the duty of cleaning, sweeping, and dusting of school buildings and care of grounds. They shall be on duty 48 hours per week, during such periods as they may be assigned at the discretion of the chief engineer.

(Firemen-janitors and janitor-firemen.) In schools where the size of the building will not warrant the employment of a stationary fireman, for the sole purpose of performing the usual boiler-room duties, a stationary fireman shall be employed pursuant to the civil-service law, whose duties shall consist of doing such janitor or other work as may be necessary for the care, maintenance, heating and cleaning of the school buildings, in addition to his regular duties as fireman. He shall be called a fireman-janitor.

In buildings where the major part of the work consists of janitor service, a janitor shall be employed who, in addition to his usual janitor service, shall also do the necessary boiler-room work which is usually performed by a stationary fireman. He shall be designated janitor-fireman, The hours of such employees shall be 48 hours per week, and they shall not be employed for less than three months in the year, except in cases of emergency.

(Window washers.) Window washers shall be employed shall be on duty 44 hours per week.

(Classification of schools.) For the purpose of determining the necessary employees and fixing the salaries of said employees, the various school plants shall be classifie

Class 4. Elementary schools having a floor area of over 80,000 square feet.

Class 5. High schools (junior and senior) having a floor area of less than 175,000 square feet. Class 6. High schools (junior and senior) having a floor area of more than 175,000 square feet.

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N business and in the home, in these days of rapid change, knowledge of science is essential. The electric iron, the vacuum cleaner, the Frigidaire, all these modern appliances, depend for their intelligent operation on a knowledge of basic facts of science. In business and in the professions, too, science plays a new and more important part each year.

Physics, Chemistry, Biology-three fundamental sciences. Teach them all with individual laboratory work, the accepted method of

You will be surprised to learn how little you need spend for an equipment which will give your pupils the advantages of real laboratory work. Write for details on the Harcourt Planning Service for High School Laboratories.

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Sec. 5. (Emergency.) In cases of emergency, in order to open or prevent the closing of schools, and with the approval of the president, the business manager is empowered to employ at existing salary schedules such help as may be necessary to operate the various school plants, for periods not exceeding sixty days, pursuant to the civil-service law, and report his action in so employing such necessary help at the next succeeding meeting of the board.

In connection with the change, the board has abolished the position of engineering-custodian and has made provision for the employment of the necessary employees of various kinds to maintain and

has made provision for the employment of the necessary employees of various kinds to maintain and operate the school plant. The persons so employed will be paid upon the following basis:

Class I.—Elementary schools having a square-foot area of less than 40,000 square feet—\$260 per month.

Class II.—Elementary schools having a square-foot area of more than 40,000 square feet and less than 60,000 square feet—\$275 per month.

Class III.—Elementary schools having a square-foot area of more than 60,000 square feet and less than 80,000 square feet—\$310 per month.

Class IV.—Elementary schools having a square-foot area of more than 80,000 square feet—\$350 per month.

Class V.—High schools having a square-foot area of less than 175,000 square feet—\$375 per month.

Class VI.—High schools having a square-foot area of more than 175,000 square feet—\$405 per month.

Assistant school-plant superintendent, 48 hours per week as assigned—\$225 per month.

Stationary firemen on duty 48 hours per week, from 3 to 12 months per year, as necessary—\$218 per month.

Fireman-janitor, 48 hours per week, as assigned—\$185 per month.

Janitor-firemen, 48 hours per week, as assigned—\$175 per month.

Janitor-firemen, 48 hours per week, as assigned—\$175 per month.

Janitor-firemen, 48 hours per week, as assigned—\$175 per month.

Janitor-firemen, 48 hours per week, as assigned—\$140 per month.

Janitor-firemen, 48 hours per week, as assigned—\$125 per month.

Window washer, on duty 44 hours per week, as

\$125 per month.
Window washer, on duty 44 hours per week, as assigned—\$150 per month.

# RURAL-SCHOOL RULES AND REGULATIONS

The board of education of Franklin county, Iowa, received a number of recommendations from Supt. H. J. Henderson, which were adopted into formal rules and regulations. In part, the recommenda-tions submitted were as follows: It is recommended that school officers, teachers,

and parents exert every effort to guard against

accidents to pupils on their way to and from school. It is recommended that the best of care be taken of school property. The defacing of buildings, the littering of school grounds, general disorderliness and untidiness, and a general air of slovenliness, all tend to disorganize and disrupt the right kind of school activities.

It is recommended that there be cooperation of all connected with the schools in the matter of punctual and regular attendance. The oftener the student is absent from school the less the effectiveness of the work becomes.

It is recommended that there be no lessening but rather that there be more honor and respect placed upon our flag and upon the ideals and institutions

it represents. It is recommended that those employed in the public schools live where they work, and that they take an active interest in the communities which compensate them for their efforts. Suitcase teachers are not in demand; neither are those who are late to school on Monday morning or early to leave en Friday afternoon.

on Friday atternoon.

It is recommended that opening days, vacation periods, etc., be uniform, allowance being made for Thanksgiving, Christmas, and Memorial Day. On other semiholidays, such as Armistice Day, Washington's and Lincoln's birthdays, schools should be in session until noon.

It is recommended that those engaged as teachers in various schools throughout the county maintain their professionalism by attendance upon educational associations, by enrolling in extension classes, or by other means of improvement and advancement of like nature.

### RULES AND REGULATIONS

—The New York City board of education has issued copies of the "fire drill" placard which gives the rules governing fire drills in the schools. The rules read as follows:

1. Emergency dismissals to insure prompt and safe egress of pupils and teachers must be conducted by the principals not less than twice in each month, in accordance with regulations issued by the superintendent.

On the first day of the term and on the first session of a reorganized school, the principal should ascertain that teachers, custodians, and assistants are capable of giving a satisfactory account of the duties required of them in fire drills. Actual tests of their duties in a fire drill should be made within

-The board of education of North Salem, New York, has made a ruling that teachers may not remain out after ten o'clock on more than one evening a week and Friday. The rule went into effect with the present school term.

-St. Louis, Mo. The board of education has revised its rules governing the appointment of assistant superintendents. Under the new rules assistant superintendents. Under the new rules there will be six assistant superintendents of instruction, these to be appointed by the board of education on the nomination of the superintendent of instruction, whose term of office will be for two years commencing on the first day of September in each odd-numbered year. An assistant superintendent elected to fill a vacancy caused by death, resignation, or otherwise, will hold office for the unexpired term.

The assistant superintendents will aid the superintendent in performing the work devolving upon him by the rules and regulations of the board. They will occupy their whole time, during the sessions of the schools, in visiting the various depart-ments of the same, except when required by the superintendent to assist him in the performance of other duties. They will report to the superintendent weekly, or oftener, stating what schools they have visited, and what day and between what have visited, and what day and between what hour, giving the details of their observations in the schools, and recommending such measures as they deem conducive to the interests of the same.

The principal of the Harris Teachers' College, under the rules, has the rank and salary of that of an assistant superintendent, and in addition to his duties as principal of this institution, will have charge of the extension terms and will have general supervisory and administrative direction of the summer teachers' college.

-The board of education of Columbus, Ohio, has enacted a rule whereby no married women teachers will be employed. Those now in the service will not be affected by the ruling.

### Chats During Recess

The Press, Spring City, Pa.: "Now that the primary elections are over and Tunney has retained the heavyweight crown and as the majority of the resulting postmortems have been performed, interest should again revert to the whys and wherefores of building people would give due consideration to such a vital community problem with the equal interest and enthusiasm as is displayed in political and fight arguments, more intelligent and truthful discussion on the needed new school building would result."

# Windows of Vita Glass

# flood modern schoolrooms with healthful rays of the whole sunlight Tv

Modern educational authorities recognize the close relation between a child's physical condition and his mental progress. Periodic examinations of eyes, teeth, and general health are a part of the program of every school. Whenever a child shows evidence of malnutrition, or is otherwise below normal in health, the present-day method is to correct that condition while developing the child's mind.

In line with this policy, many schools over the United States are installing windows of Vita glass in their classrooms. Vita glass is the new ultra-violet glass that brings *indoors* the precious healing portion of outdoor sunshine. This health-building ingredient in sunlight is made up of certain ultra-violet rays.\*

These vital health rays are, in truth, the cream of the sunlight. They tan the skin. They build strong bones and sound teeth in children, and help prevent rickets. They strengthen resistance to disease and destroy harmful bacteria. They build up the blood. Yet the ordinary window pane shuts out these priceless rays. Indeed, the pupils might as well be in darkened classrooms—for all the good they are getting from the sunshine.

### STRIKING RESULTS WITH SCHOOL-CHILDREN AT SMETHWICK

Over a period of three years, now, it has been proved that Vita glass does transmit these valuable ultra-violet rays. No more convincing example of the value of Vita glass occurred than in the Smethwick School test. Two groups of children in the same grade were placed in separate rooms. One room was equipped with Vita glass; the other had ordinary window panes. At the close of the school year, those children in the Vitaglazed classroom had grown approximately 50% more in height and weight than the other class. Absences had been reduced by 43%. Here was striking proof that Vita glass brings indoors the elements in sunshine that promote normal healthy growth. The other children had been stunted by sterile sunshine.

Except for the word VITA etched in a corner of each light, clear Vita glass has the same appearance as ordinary window glass. Cathedral Vita glass is translucent and is excellent for skylights, upper panes of windows, wash rooms, etc. Both are supplied, cut to specification, ready to install.

As a prominent school official in your community, you should know the facts about Vita glass. The coupon below is for your convenience.

\*We refer to those shorter ultra-violet rays between 2910 and 3200 Angstrom Units — recognized as the health-giving element in sunlight. The longer ultra-violet rays, sometimes called photographic ultra-violet, which are admitted to some extent by ordinary window glass, have little or no health value.

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### CERTIFICATION OF GEORGIA TEACHERS

-For the last four years a system of certification for teachers has been in operation in the state of Georgia under the direction of the state board of education. The original plan was greatly improved upon under the administration of the late Fort E. Land and is now approaching the ideal. During the four-year period, 27,000 applications of teachers have been graded, passed upon, and issued. More than 7,000 teachers attended summer school during the past summer.

Some months ago a change was effected in the present plan of certification, which became effective in September, 1927. The new rules are applicable only to original applications received in the education department after September, 1927. Holders of certificates before that date have the benefit of the rules prevailing at the time of application.

The most outstanding changes are those affecting elementary certificates, and professional or educational requirements for all certificates. The issutional requirements for all certificates. The issuance of elementary certificates which can be converted into professional certificates after two years of college work has been discontinued. In place of the elementary certificate, the state grants a general elementary certificate which can be renewed for three-year periods. In the future the required professional, or work in education must be done in accordance with the state adopted plan.

TEACHERS AND ADMINISTRATION

—According to a recent ruling of the New Jersey Education Department, a teacher comes under tenure upon the completion of three consecutive calendar years of service in the same district. The term "year" as used in the New Jersey tenure law means calendar year since the term is not of the means calendar year, since the term is not other wise qualified; and in like manner, the term "year" as used in a teacher's contract, if not qualified, will be deemed to mean calendar year. Under the ruling, upon the completion by a teacher of her third term of employment, where

a teacher has served for three consecutive years in the same district, such teacher automatically comes under tenure upon the completion of the third term without the necessity of a fourth appointment. If a teacher is appointed for an actual school term from September to June, or if she has not served for three consecutive calendar years in the district, she is then not under tenure but must complete a fourth appointment to gain the protection

—Galena, Kans. The amount of teaching ex-perience presented by the school faculty varies from none prior to this year, up to 32 years. Only six of these, however, have had actual experience prior to this year. All of these six have had practice teaching in the teacher-training courses and none had less than two years of college. Three teachers on the faculty have had 25 or more years' experience in the Galena schools.

Classifying the faculty on the basis of preparation for teaching, it is found that 9 have had 120 or more college-hours of work leading to a degree; 22 others with less than a degree have completed two or more years of college work; and 6 others have from one to two years of college work. Only two teachers have had less than a year of college

-An unusual plan of providing opportunity for local candidates to obtain positions in the schools has been worked out by Supt. C. E. Ackley of Ashland, Kentucky. Under the system, opportunity is given those who have attained the age of 18 and have met the training requirements of the schools, but have had no experience, to demonstrate their ability to teach.

It is provided that such teachers shall be classed as cadet teachers. Only those applicants who have been recommended by the superintendent and approved by the teachers' committee may be enrolled

and entitled to be classed as cadet teachers.

Under the rules, it is provided that annually after 1927-28, the amount of college training required for eligibility will be increased by six semester hours, until the requirement has reached 36 semester hours, at least twelve of which will be in education.

The plan has five principal advantages to commend it. It offers opportunity for meritorious candidates for teaching positions in the schools to show that they have more than a passive interest in the profession.

It offers opportunity to candidates with training but without experience, to demonstrate what they

can do in actual classroom teaching.

It provides promising candidates with essential instruction in the aims, methods, and requirements of the school system.

It makes possible the maintenance of an eligible list for appointment to all elementary positions not requiring special training nor a special type of experience.

It makes available at all times a competent corps

of substitute teachers.

-The teachers of the state of Vera Cruz, Mexico, went on a strike because they have not been paid their salaries for the year past. More than 100,000 children are out of school. "Back pay is owed to teachers in practically every state of Mexico and the teachers are under the thumbs of the politicians to such an extent that no teacher is sure of his job unless he plays politics successfully," a labor leader said. "As a result the higher positions in numerous Mexican states are held by men not

We now are teachers, but excellent politicians. organizing teachers' unions in all the Mexican states and intend to drive the politicians out of the high

places in the teaching profession."
—Fred T. Gladden, state superintendent of public instruction of Indiana, estimates that there are 5,000 teachers in that state without positions. Indianapolis alone has 1,000 more applications on file than positions.

—The board of education of Indianapolis, Ind., adopted the level-salary plan which adds \$380,000 to the pay roll. In comment of the plan the Indianapolis Star says: "The city naturally wishes to pay the grade teachers a fair salary and will not begrudge them anything it can afford. The present, however, is no time for adding \$380,000 to the pay roll. Furthermore, the increase cannot be justified. Furthermore, the increase cannot be justified by existing conditions in the teaching profession, nor can the salary system be defended by those conversant with its actual operation. The supply of good teacher material is ample and the number of applications for teaching positions so large that the board had no excuse for the extra burden on the targeters." the taxpayers."

—More than 300 extra teachers employed as assistants in principals' offices in the Chicago schools won a victory in court on September 6, when the board agreed to retain the teachers if they dropped their petition for an injunction restraining the board from removing them.

Under the agreement, the teachers are to remain in the school system, to be later transferred to class-room positions by the board. The board will then be free to fill the positions in the school offices with civil-service appointees. In the transfers to other positions, the teachers will suffer no reductions in salary.

-The Illinois legislature has passed a law governing tenure of teachers. Under the law, any teacher, principal, or superintendent, who completes a probationary term of two years of successful teaching may be employed for three years without the formality of annual reelection.

—Under a new rule, all teachers in Knawha county, West Virginia, must file a health certificate with the district board of education immediately after the opening of the schools. After this year

after the opening of the schools. After this year the certificate must be filed and made a part of all applications for teaching positions. The rule is compulsory and teachers who become disqualified will not be allowed to hold positions in the schools.

—North Bergen, N. J. The school board has passed a rule providing for the dismissal of all teachers who marry before the completion of two years of service. The board has recently ordered the installation of time clocks to check the arrival of teachers. of teachers.

—Terre Haute, Ind. The school board has adopted a rule which provides that married women shall not be employed as teachers. The rule does not affect those already in the service.

(Concluded on Page 100)

# WHEN Advantages are Summed Up



# THE ANSWER IS LYON STEEL LOCKERS

The ten 1927 issues of this publication have contained detailed accounts in Lyon advertisements of the many features of Lyon Steel Locker design, construction, and finish.

The welded steel frame has such strength that installations of Lyon Steel Lockers stand in permanent alignment.

Lyon Locker doors are so reinforced that they are the most rigid locker doors made.

Hinges make a full loop around the hinge pins with both ends of the loop riveted. These full loop hinges act as door stops and are so strong that a man can throw his weight against the door without springing the hinges.

The locking device is comparatively quiet and practically everlasting.

The double thick vertical corners augment the rigidity of the frame.

The highly polished steel is known as furniture steel, and is finished in an enamel that passes rigid hammer tests.

Their dependability of operation, even through long periods of rough usage, holds upkeep expense ignorably low.

There is an absence of sharp corners and of projections that might harm clothes or person. A variety of locker types permits the selection of a style to fit particularly the needs of your school.

Sum up these advantages and the answer, from coast to coast, is Lyon Steel Lockers.

And finally there is the help of Lyon Engineers, with this nation-wide experience that will be given, without cost to you, to you and your architects in planning your locker installation. Write us about your plans and your locker requirements.



# LYON The double thick vertical configuration assurance of lasting locker satisfaction. STEEL LOCKERS



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To equip your school with Dayton Safety Ladders is to make a great and permanent improvement! For a score of years they'll save time on countless jobs, and guard the lives and limbs of all who use them. On the broad platform of the Dayton, the workman does his task as quickly and confidently as on solid ground—all his tools beside him—no running up and

PO equip your school with Dayton Safety Ladders is co make a great and permanent improvement! For a score of years they'll save time on count-

The Dayton is made of steel-braced aeroplane spruce — in sizes 3 to 16 feet—folding compactly for carrying or storing—the finest ladder ever built! Investigate its many exclusive features and low price today!

Write Dep't ASBJ-11 for prices and complete information

# The Dayton Safety Ladder Co.

121-123 WEST THIRD STREET CINCINNATI, OHIO.

(Concluded from Page 98)

Safety Ladder

—Atlanta, Ga. Dismissal will be the penalty for any teacher who marries after January 1, 1928, if the board approves a proposed change in the rules governing the employment of teachers.

—Mayor Wm. Hale Thompson of Chicago, in a recent interview, denounced Margaret Haley, business representative of the Chicago Teachers' Federation. He charges that she obstructed legislation designed to increase the city's tax income and thereby defeated a proposed increase in teachers' salaries. He said "her sole purpose in life is to fight somebody, whether she is right or wrong, whether with friend or foe, and no matter what the consequences may be." The mayor also referred to Miss Haley as a "supposed friend of the school teachers" and later as "their enemy." The mayor's criticisms of Miss Haley followed her request at a federation meeting of a contribution of \$25 from each teacher with which to make a fight to prevent a rumored cut in salaries of school teachers. Miss Haley was quoted as saying that the 4,000 contributions, or an aggregate of \$100,000, was needed before she could "turn a wheel."

ers. Miss Haley was quoted as saying that the 4,000 contributions, or an aggregate of \$100,000, was needed before she could "turn a wheel."

—No teacher with less than twenty years of service in the public-school system will be considered by the New York City board of education for sabbatical leave of absence after February 1, 1928.

—The Association of Retired Teachers of New York City has purchased a home at Cornwall, N. Y. It is the beginning of what is believed to ultimately become a substantial home for retired teachers.

—The American Federation of Labor in Chicago has announced that it will begin a movement to either absorb the local teachers' federation into the Federation, or to enroll a union as a rival to Miss Margaret Haley's. At present there are three unions of Chicago school-teachers, two of which are affiliated with the American Federation of Labor. The third is the Chicago Teachers' Federation, which is headed by Miss Haley and which is considered the most influential of the three unions.

Under the proposed plan, Miss Haley will be invited to affiliate her organization with the Federation of Labor, by applying for a charter with the American Teachers' Federation.

—Beginning with September, the Montclair, New Jersey, Normal School will function as an institution for the training of teachers for the high schools of the state. The school has in the past been devoted to the training of elementary-school teachers.

—The board of education of Easton, Pa., has adopted a single-salary schedule, which provides that salaries shall be the same for elementary, junior-high-school, and senior-high-school teachers with the same training and experience.

—The women high-school teachers' association of New York City has voted unanimously to oppose the proposed plan of granting super-maximum salary increments to teachers, charging that it is nothing better than a revival of the former superior merit plan. The superior merit plan of 1911 affected high-school teachers only, while the present plan includes elementary teachers as well.

A committee has been appointed by the teachers' association to prepare a brief setting forth objections to the adoption of supermaximum schedules based on a list of six points.

—New York, N. Y. It is believed that salary increases for the supervisory officials of the education department will develop into a serious issue, threatening the entire teachers'-salary-revision program. If the board of education decides that increases larger than those recommended by the mayor's committee on salaries should be fixed for high-school principals, superintendents, and directors, there is reason to believe that the board of estimate will record its objection.

It has been reported that the salary-revision program being formulated by the school officials for presentation to the board of education would accept, with a few reductions, the schedules recommended for teachers, but propose that many of the rates for supervisory officials be raised.

—The school board at Bellingham, Wash., adopted a rule to the effect that "No teacher shall be entitled to an increase due to tenure until she has served in this district for one full fiscal year; nor shall a teacher be entitled to an increase for a fractional portion of a year. Any substitute teacher who has served for more than four weeks continuously and is serving at the close of the school year, shall be entitled to that portion of the June salary as the number of days she has taught is to two hundred; but she shall not be entitled to any portion of the July or August accumulated salary."

—The board of education of Sioux City, Iowa, holds an annual party for the teachers of the school system, with games, contests, stunts, dancing, and a picnic dinner. This year the party was held at the Riverside Boat Club, the beautiful grounds of which were turned over to the board for this event. An orchestra was employed to add to the evening's entertainment.

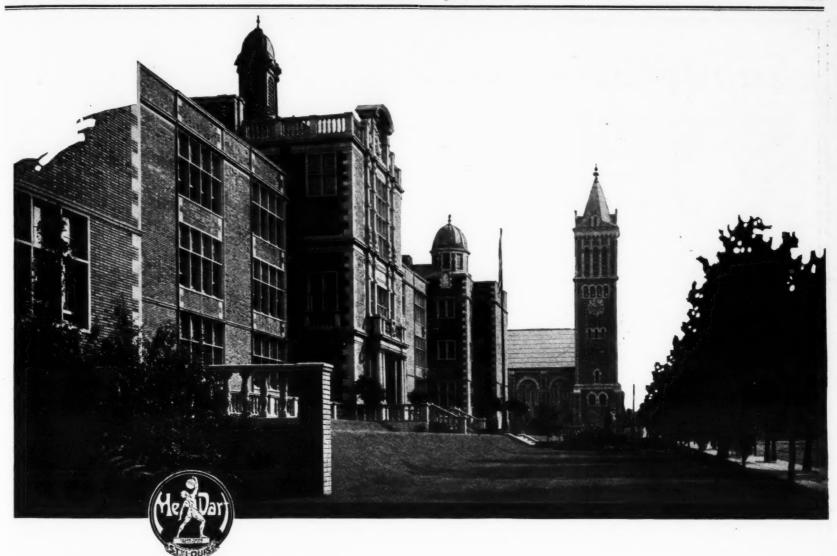
—During the past school year Pittsburgh inaugurated a plan of sending two supervisors to the same school at the same time; one to supervise the first and second grades, the other the third and fourth grades. The purpose of the plan is to conserve the time of the principal, to allow both supervisors in conference with the principal, to get his reaction toward the work, and to get the spirit of each school and its needs.

Under the direction of the supervisors, teachers who had done outstanding work were selected to give demonstration lessons showing a definite plan of procedure. The lessons were followed by a period of discussion. The results were soon evident in improved instruction.

—Fourteen teachers on the staff of the Hazard, Kentucky, schools, attended summer school the past summer. An extension class for teachers is being planned, which will be under the direction of the state university.

—Roanoke, Va. The school board has adopted a rule, providing that the accumulative credit for teachers' absence shall be allowed for the school year 1927-28. Under the rule, such part of the ten-day absence allowance as was not used in 1926-27, will be added to the allowance for 1927-28. It is provided, however, that payment for the accumulative credit over the ten days' absence of 1927-28 may be withheld until the end of the session and the total cost will be limited to \$1,000 for the session of 1927-28, to be prorated among the teachers entitled to it in proportion to the amount due them. The accumulative allowance is applicable only to such teachers as complete the full session of 1927-28.

—Abington, Pa. A salary schedule has been adopted for the Abington township school district which is believed comparable to those of similar districts in the vicinity. The schedule which was adopted in March, 1926, is now in the second year of its operation.



# Steel Locker Economy - -

ISE purchasers select equipment which adds to the beauty and appearance of a school and contributes to its convenience and efficiency \* \* \* not only for today but for years to come. When lockers are to be installed, they select the type that is in keeping with the finest fittings and furnishings, presents a neat and pleasing appearance and withstands the rough treatment of heedlessly abusive youngsters. That is economical, sane buying.

Medart Steel Lockers have always been the first choice of school officials because of their superior design, construction and finish. Made of the finest steel. Warp-proof. Baked-on enamel surface furnishes clean attractive appearance. Finished in green or gray with standard louvered doors. Many styles and sizes to meet all requirements. Write for Medart Locker Catalog describing in detail the entire line.

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George Washington School, Morristown, N. J., in which Halsey Taylor Drinking Fountains are installed.

HE vertical stream has long been passébecause it cannot provide assurance of sanitation. And SAN-ITATION is the allimportant factor in determining any drinking fountain. The only PRACTICAL sidestream type-so Halsey Taylor Drinking Fountains have been termed by school authorities and architects throughout the nation! Today you find them in the finest schools safeguarding the health of the pupils.



The exclusive Taylor AUTOMATIC STREAM CONTROL keeps stream constant, be the pressure high or low. There is no necessity for lips to touch projector—this means positive freedom from the dantive freedom from the dangers of contamination. Safe, sanitary, PRACTICAL!

## DRINKING HALSEY TAYLOR **FOUNTAINS**

The Halsey W. Taylor Co., Warren, O., (Offices in Principal Cities)

LEWISTOWN, MONTANA, ADOPTS RULES
GOVERNING TEACHERS' SALARIES
—The school board of Lewistown, Montana, has
adopted new rules governing the qualifications,
employment, and compensation of teachers in the
schools. Under the rule, the minimum educational
qualifications of teachers in the city schools are qualifications of teachers in the city schools are qualifications of teachers in the city schools are two years of academic and professional training beyond the high school in either normal school, college, or university. Teachers appointed to teaching positions must have a Montana state life certificate and must be equipped to teach music, drawing, penmanship, and physical education, with or without supervision. In the selection of teachers, effectively is given to experience health social tentuction is given to experience health social tenattention is given to experience, health, social tendencies, character, academic scholarship, and leadership qualities.

The rules prohibit the employment of married women teachers unless the family is dependent upon the woman teacher for support. Any married woman teacher who is employed, while her husband is incapacitated, must surrender her contract when her husband enters into business or professional relations, thus giving evidence of his ability to support his family. An unmarried woman teacher

upon entering matrimony must resign her position at the close of the semester. Since May, 1927, all teachers who have arrived at the age of 65 have been required to retire, and any teacher who may in the future reach that age must also retire, preferably at the close of the school term.

The schedule provides that the yearly salary of teachers shall be divided into ten equal payments. Teachers are to be rated each year on or before the last day of June by the administrative staff, using the rating scale worked out by a committee of teachers and approved by the school district. Supervisors and principals will be compensated and ponsibility, training, experience, and success in

All teachers will be given five days' leave of absence for sickness each year, without loss of salary. In case of contagious or infectious dis-

eases contracted while in service, teachers may be allowed extra time at the discretion of the school board. A leave of absence may be granted any teacher or principal after seven or more consecutive years of service in the schools. The leave of absence may be taken for not less than one-half year, nor more than one year. During such leave of absence, the teacher will be paid the same salary she would have received in active service, less the cost of the substitute. The leave of absence does not affect the standing of the teacher under the salary schedule as it relates to annual increments, retirement, and rating.

The schedule governing the minimum and maximum salaries of teachers is as follows:

Minimum Salaries—Advanced normal graduate,

without experience, \$1,150; normal graduate, with one year's experience, \$1,175; normal graduate, with two years' experience, \$1,225; normal graduate with three or more years' experience, \$1,300; college graduate, with degree, \$1,400 to \$1,475.

Maximum Salaries—Advanced normal graduate who has not increased her training by at least 30 quarter-hours, 24 of them in approved college work, \$1,575; a college graduate who has not increased her training by 20 quarter-hours, twelve of them in approved college work, \$1.675; teachers who have met the preceding requirements, \$1,825. It is provided that a teacher must attain a rating of A the year previous to reaching the maximum in order to obtain the maximum salary.

The annual increases are \$60 per year, until the maximum provided in the schedule has been

PRINCIPALS' SALARIES IN EL PASO
—El Paso, Texas. The school board has adopted
a salary schedule for grade principals which is
determined according to the size of the buildings and the number of rooms under a principal.

The basic salary assigned to principals according to the schedule is as follows:

### THREE STAGES OF DISCIPLINE

All the theories in the world are useless if you lcate in a boy a certain pride in b kept in order, and later in keeping himself in order, and later still in keeping others in order. Those are the progressive stages through which our manhood must pass.—"Ian Hay" Beith.

Group A, \$2,400—36 to 40 rooms
Group B, \$2,300—31 to 35 rooms
Group C, \$2,200—26 to 30 rooms
Group D, \$2,100—21 to 25 rooms
Group E, \$2,000—16 to 20 rooms
Group G, \$1,800—6 to 10 rooms
Upon the basic salary is built each principal's
actual present salary as follows: Count each three
years of experience as principal, giving \$50 additional salary up to a total of fifteen years. The tional salary up to a total of fifteen years. completion of work in a college summer school attended for a minimum of six weeks means that the principal will be given \$50 additional for the three years following. No more than \$50 each year may be added to a principal's salary for this reason, even though he may attend a summer school each summer.

The maximum salaries for principals in the different groups are as follows, but to this maximum is to be added \$150 as a special reward to a principal who obtains a master's degree:

Group A—Maximum, \$3.200
Group B—Maximum, \$3.000
Group C—Maximum, \$3.000
Group D—Maximum, \$2.900
Group E—Maximum, \$2.800
Group F—Maximum, \$2.700 Group Group F—Maximum, \$2,700 G—Maximum, \$2,600

-Minneapolis, Minn. The school board has adopted a salary schedule for teachers, which is to become effective January 1, 1928. The salary schedule divides teachers into two professional groups and fixes minimum and maximum salaries for each group based on professional training. Group one comprises teachers with two years of professional training beyond high school, who are to be paid a minimum of \$1,200 and a maximum of \$2,400. Group two comprises teachers with four years beyond high school, who are to be paid a minimum of \$1,500 and a maximum of \$2,800.

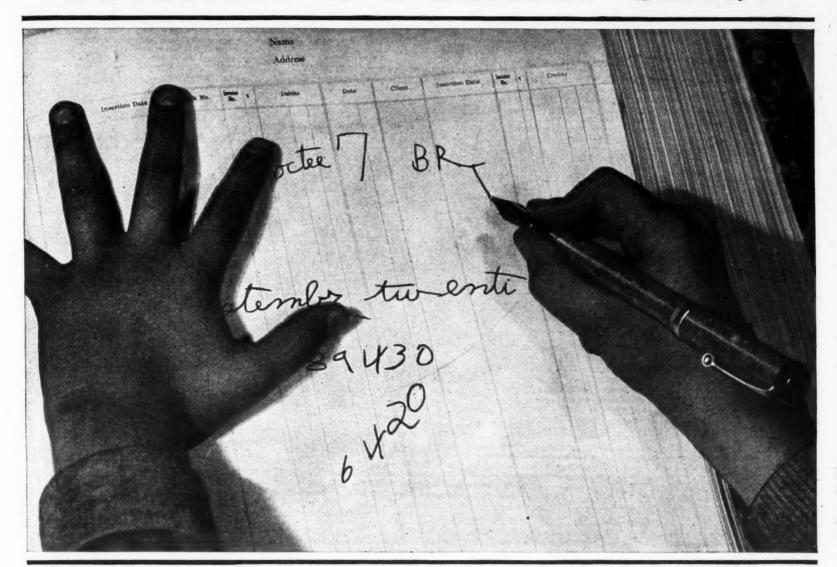
The revised schedule means an increase in the salaries of teachers of \$106,100 the first year, \$222,950 the second year, \$347,575 the third year, and \$448,500 the fourth year, a total of \$1,125,125 during the four years.

—Camden, N. J. The school board has raised the

pay of evening-school teachers from \$3.50 to \$4 per

Architectural Firm Opens New Office
Messrs. Giesecke and Harris, school architects,
have recently opened an office in the Second National Bank Building, Houston, Tex. The home office of the firm is in Austin.

# Would You Leave Financial Problems to a School Child?



# Sanitation Is More Important — Don't Let Children Control It

Would you leave bonds and mortgages to the management of a young school child?

Yet, school sanitation is far more important than financial problems. Children should never control school water closets—the most important sanitation fixture. They forget. And a putrid unflushed closet causes sickness and disease-perhaps serious-perhaps deadly.

> The Clow Automatic Closet makes school hygiene positive. Flushing responsibility rests on the Clow Automatic - and it never forgets. After each use,

a fast, sure flood of water scours the entire bowl. And the bowl is designed to distribute the water equally to rim and trap—insuring a taintless closet always.

The Clow-Madden valve is far simpler than any other closet valve on the market today. There are no complicated floats to cause trouble virtually nothing to go wrong. Water consumption is less-repair costs are lower.

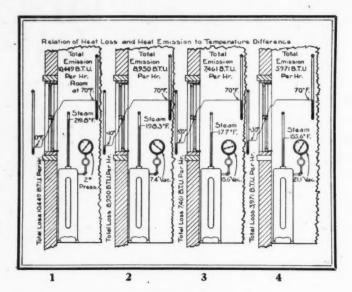
Our new booklet shows how over 3,000 American schools are insuring clean, fresh toilet rooms, and a lower plumbing bill. Send for it today. James B. Clow & Sons, 201-299 N. Talman Ave., Chicago.

Never, never forgets

Forty-Eight Styles, Heights and Types to Meet Your Requirements







# Room vs. Outdoor Temperature with the Dunham Differential Vacuum Heating System

NTIL the advent of the Dunham Differential Vacuum Heating System, steam could not be circulated within the radiators and piping on sub-atmospheric

The rate at which a building loses heat is directly proportional to outside temperature and wind pressure, providing the temperature within the building remains constant. Inside temperatures can remain constant only when the heat given off by the radiation equals the heat loss from the building. This condition was impossible to secure until the advent of the Dunham Differential Vacuum Heating System.

The relation of room temperature to outside temperature is shown in the above illustration. It will be noted that with the Dunham Differential Vacuum Heating System it is possible to decrease the steam temperature within the radiators and thus reduce the heat loss from the building as author temperatures increase.

building as outdoor temperatures increase. Reference to section 1 in the illustration shows that with a zero outdoor temperature there is a total heat loss from the room of 10,449 B. T. U. per hour, which is equalled by a heat emission from the radiator of 10,449 B. T. U. with steam at 219.8 degrees (corresponding to two pounds pressure). With an outdoor temperature of 10 above zero (Sec. 2) the heat loss and heat emission are respectively 8950 B. T. U. per hour but now steam is supplied at 198.3 (corresponding to 7.4 inches of vacuum). Sections 3 and 4 of the illustration show further reduction in steam temperature and pressure with corresponding decreased heat emission from the radiator and consequent reduced heat loss from the building. It should be particularly noted that the room temperature

is maintained constant at 70 deg. under these varying outdoor temperature conditions.

# C. A. DUNHAM CO. DUNHAM BUILDING 450 East Ohio St., Chicago

Over seventy branch and local sales offices in the United States, Canada, and the United Kingdom, bring Dunham Heating Service as close to you as your telephone. Consult your telephone directory for address of our office in your city. An engineer will counsel with you on any project.

LOOK FOR THE NAME Dunham This nameplate identifies a genuine DUNHAM Radiator Trap

U. S. Patent No. 1644114. Additional patents in the United States, Canada, and Foreign Countries now pending.





# ROSS Steel BOILERS

Commonly acknowledged the supremely efficient and economical heating plant for school houses because of quick response to heating needs.



A SOLID UNIT OF ELECTRICALLY WELDED OPEN HEARTH STEEL, MADE TO OUTLAST YOUR BUILDING.

THE health of teachers and scholars and the whole morale of the school depend on your heating plant. You will render your community and the children under your care a vital service by insisting on the proper heating plant for your new or renovated building.

The Ross Steel Boiler with the smokeless firebox, long combustion chamber, exceptional Crown Sheet area, plus extended hot gas travel and rapid circulation extracts the utmost of heat units from any fuel. The patented Convex full length, self-cleaning Crown Sheet banishes the usual accumulation of silt over the hottest part of the furnace and the consequent loss of heat.

The Ross Steel Boiler is especially adapted for burning oil and the cheaper grades of coal.

Write for Catalog and inform yourself on the advantages of this boiler.

# The Frost, Manufacturing Co.

1524 HENDERSON ST., GALESBURG, ILLINOIS

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# Wherever waste accumulates

locker-rooms playgrounds workshops offices

SOLAR self-closing RECEPTACLES do more than replace waste baskets. They constitute one of the most active factors known in school sanitation equipment.

SOLARS increase to a very marked degree hygiene, comfort, and safety. They protect against fire, conceal unsightly waste matter, and afford a super-convenient depository for soiled or discarded things of every sort.

The SOLAR patented gravity swinging



top provides a receptacle as easy to use as an open waste container. . . yet is closed at all times.

The SOLAR self-closing RECEPTA-CLE can be had in nine different sizes and finished in gray, green, white, grained mahogany, to harmonize with all surroundings.

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# SOLAR Self-Closing RECEPTACLES

# Present-Day Problems and Conditions in City and Rural Schools

Gleaned from Studies of the United States Bureau of Education

PROGRESS IN EXAMINATION OF SCHOOL CHILDREN

—Dr. James F. Rogers, chief of the Division of Physical Education and School Hygiene of the U. S. Bureau of Education, has recently pointed to one advance in school health work as being important, the taking of the parent into the confidence of the school by inviting him to be present at the examination. This method secures first-hand information as to the child's history and saves expensive home visitation of a nurse.

expensive home visitation of a nurse.

School health work has its logical beginning in an appraisement of the child's bodily state. This appraisement which began historically in a cursory examination for vermin and for active disease, has developed into a study of the child's physical condition, and has widened to include the habits affecting his health and physique.

From the examination of the college youth a half century ago, medical inspection has filtered down to children of school age, and the past two years have seen its logical application to those who are not yet old enough to enter school. It is deemed wiser to have the child examined and prepared before he is presented at the door of the school.

In securing the physical improvement of the child, the school has had something more in mind then the improvement of his most of his most of the reserves.

In securing the physical improvement of the child, the school has had something more in mind than the improvement of his mental responses, yet such improvement is to be expected. It is not easy to measure the results and record them but the unanimous opinion of principals and teachers is that the general tone of the pupils has improved, and that there have been marked changes in schoolwork, as well as saving in educational effort and monetary outlay.

The physical inspection of the child is changing from a medical inspection to a health examination, which looks not only to the present condition but to the future welfare. The future is looked after by the use of protective measures against diseases such as scarlet fever and diphtheria. These preventive measures reduce not only sickness and death but the many defects which are left in their train.

THE PER-CAPITA COST IN CITY SCHOOLS IN 1926

Mr. Frank M. Phillips, chief of the statistical division of the United States Bureau of Education, in a recent pamphlet entitled "Per Capita Costs in City Schools," gives the results of an analysis of current expenses per student in average daily attendance in 247 city-school systems for the school year 1925-26. In connection with the report, a number of tables are given showing the cost per student in groups of cities of various sizes.

number of tables are given showing the cost per student, in groups of cities of various sizes.

The report lists under general control all expenditures that go toward the administration of the schools as a whole. It includes salaries and expenses of school-board members, superintendents of schools, superintendents of buildings, business managers, attendance officers, and those in charge of the school census, rentals, and cost of operation and maintenance of administration buildings.

and maintenance of administration buildings. The cost of instruction includes salaries and expenses of teachers, supervisors, supervising principals, educational supplies, free textbooks, library books, and those expenditures that go toward improving the quality of teaching.

Under operation of plant are included all expenditures used in keeping the school buildings open and ready for use. This includes cost of fuel, light, and water; salaries, expenses, and supplies of janitors, engineers, watchmen, and other building employees.

Maintenance costs include all expenditures for keeping the school plant in good repair, but do not include improvements and additions. Under coordinate activities are included salaries

Under coordinate activities are included salaries and expenses of field workers in compulsory attendance; and medical, dental, and nursing service. Auxiliary agencies include transportation of pupils, school gardens, operation of playgrounds and savings banks.

ings banks.

Fixed charges include payments for pensions, rent, insurance, and taxes, but do not include interest charges.

Capital outlays are not included in current expenses, nor are allowances for depreciation of property values.

The report shows that in cities of 100,000 population and more, the average for current expenses in 35 cities is \$104.82; for general control, \$3.94; for operation of school plant, \$10.09; and for maintenance of plant, \$5.51. (Tables I and II.)

In cities of 30,000 to 100,000 population, the average for current expenses in 60 cities is \$92.85;

average for current expenses in 60 cities is \$92.85; for general control, \$3.03; for operation of plant, \$10.36; and for maintenance of plant, \$4.02. (Tables III and IV.)

TABLE I, Current Expenses Per Student in Cities of 100,000 Population and M Total General	lore (5 Highes	t Cities)
Cities Expenses Control Instruction	Operation	Maintenance
Yonkers, N. Y	\$11.96	\$ 5.05
Buffalo, N. Y	15.97	11.62
Los Angeles, Calif	10.68	3.93
Springfield, Mass	16.68	6.23
Grand Rapids, Mich	· 15.63	6.31
Average 104.82 3.94 80.57	10.09	5.51
TABLE II. Current Expenses Per Student in Cities of 100.000 Population and M Total General	More (5 Lowes	t Cities)
Cities Expenses Control Instruction	Operation	Maintenance
Bridgeport, Conn	\$ 8.36	\$ 3.65
Fort Worth, Tex	3.91	3.33

Bridgeport, Conn	\$ 3.65
Fort Worth, Tex	3.33
New Orleans, La	6.91
Norfolk, Va, 64.02 1.22 53.40 6.73	1.78
Average	5.51
TABLE III. Current Expenses Per Student in Cities of 30,000 to 100,000 Population (5 H	ghest Cities)
Long Beach, Calif	\$ 3.90
Mount Vernon, N. Y	4.39
Sacramento, Calif	2.30
East Orange, N. J	2.96
Colorado Springs, Colo	4.91
Average 92.85 3.03 70.93 10.36	4.02

# Another Buffalo-Carrier-equipped School

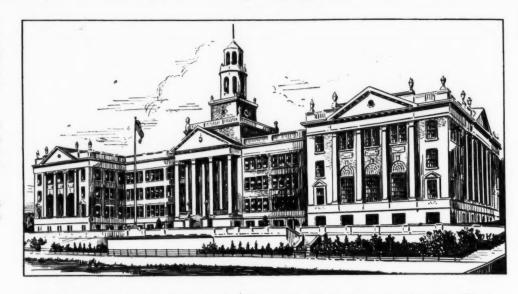
Characteristic of the Board's purpose of making this one of the finest of modern schools was the choice of Buffalo-Carrier equipment for heating and ventilating the new Pawtucket Senior High School.

Five Buffalo Duplex Conoidal Fans and two Carrier Air Washers insure a supply of fresh, pure air properly tempered and humidified, to every section of the building.

The equipment is especially smooth and quiet in operation and requires but little attention.



Complete Heating and Ventilating Systems with Carrier Air Washers



The New Pawtucket Senior High School extends 338 ft. along the Pawtucket River, R. I., and reaches a height of 196 ft. at the pinnacle of the central tower.

The heating and ventilating system is arranged to provide different conditions for the auditorium and classrooms to what is used in the gym and pool. Separate fans, of the Buffalo Duplex Conoidal type, force air through heaters and Carrier Air Washers which remove dust and filth and temper to the proper temperature and humidity. Buffalo exhaust fans on the top floor remove a total of about 147,000 cu. ft. of stale air per min.

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TABLE IV. Current Expenses Per Stud	Total	General	100,000 Popul	ation (5 Lowe	st Cities)
Cities	Expenses	Control	Instruction	Operation	Maintenance
Portsmouth. Va	\$ 50.82	<b>\$1.4</b> 3	\$ 42.89	\$ 4.09	\$ 1.13
Mobile, Ala	50.24	1.77	40.28	3.02	2.39
Savannah, Ga	42.95	1.43	36.03	2.77	1.47
Macon, Ga	41.15	.86	34.17	2.21	1.82
Montgomery, Ala	40.37	1.81	34.45	3.07	.21
Average	92.85	3.03	70.93	10.36	4.02
TABLE V. Current Expenses Per Student	in Cities of	10,000 to 30,00 General	00 Population	and More (5 H	ighest Cities)
Cities	Expenses	Control	Instruction	Operation	Maintenance
Virginia, Minn.	\$175.36	\$10.20	\$105.60	\$30.97	\$13.34
Montclair, N. J	152.84	7.80	118.19	17.41	5.03
West Orange, N. J	133.65	6.15	98.35	14.91	8.52
Englewood, N. J	130.72	5.07	95.49	18.59	6.41
Alhambra, Calif	120.16	5.73	92.68	13.20	2.83
Average	85.38	3.58	63.84	10.37	3.74
TABLE VI. Current Expenses Per Student	in Cities of I	10,000 to 30,00 General	0 Population	and More (5	Lowest Cities
Cities	Expenses	Control	Instruction	Operation	Maintenance
Pine Bluff, Ark	\$ 46.74	\$ 1.46	\$ 38.82	\$ 4.52	\$ 1.23
Spartanburg, S. C		.84	36.36	3.30	1.26
Rome, Ga		1.80	24.51	2.09	.48
Waycross, Ga	29.49	1.58	26.44	1.02	.45
Phenix City, Ala	24.76	1.88	20.68	1.25	.53
Average		3.58	63.84	10.37	3.74
TABLE VII. Current Expenses Per Stud	lent in Cities Total	of 10,000 to General	30,000 Popula	ntion (5 Media	n Cities)
Cities	Expenses	Control	Instruction	Operation	Maintenanc
Mahoney City, Pa		\$ 5.53	\$ 50.79	\$ 7.50	\$ 4.37
Stratford, Conn		2.62	54.69	6.77	4.25
Coffeyville, Kans	68.55	2.49	55.78	7.86	1.61
Cape Girardeau, Mo	66.89	3.13	51.27	4.99	3.63
Chillicothe, Ohio	63.97	2.45	45.90	7.15	3.42
Average		3.58	63.84	10.37	3 74

TABLE VIII. Current Expenses Per	Total		10,000 Population	(5 Highest	Cities)
Cities	Expenses	General Control	Instruction	Operation	Maintenance
Tonopah, Nev		\$ 9.58	\$117.95	\$19.36	\$15.74
Piedmont, Calif		6.79	97.54	18.09	3.33
San Luis Obispo, Calif	119.77	4.76	97.03	7.46	.90
Hempstead, N. Y	118.41	4.33	73.50	11.26	21.11
Sheridan, Wyo	114.19	5.79	83.29	9.25	3.25
Average		4.00	56.13	8.11	3.02
TABLE IX. Current Expenses Per			10,000 Population	(5 Lowest	Cities)
	Total	General			
Cities	Total Expenses	General Control	Instruction	Operation	Maintenance
Cities Fairfield, Ala.	Total Expenses \$ 37.92	General Control \$ 3.92	Instruction \$ 29.20	Operation \$ 3.01	Maintenance \$ 1.07
Cities Fairfield, Ala	Total Expenses \$ 37.92 37.87	General Control	Instruction \$ 29.20 30.39	Operation \$ 3.01 1.38	Maintenance \$ 1.07
Cities Fairfield, Ala	Total Expenses \$ 37.92 37.87	General Control \$ 3.92 4.73	Instruction \$ 29.20	Operation \$ 3.01 1.38 2.39	Maintenance \$ 1.07 .39 1.47
	Total Expenses \$ 37.92	General Control \$ 3.92 4.73 4.07	Instruction \$ 29.20 30.39 28.58	Operation \$ 3.01 1.38	Maintenance \$ 1.07

TABLE VIII. Current Expenses Per Student in Cities of 2,500 to 10,000 Population (5 Highest Cities)

Total General

TABLE X, Current Expenses Per Stud	ent in Cities of Total	2.500 to General	10,000 Population	(5 Median	Cities)
Cities Tama, Iowa	Expenses	Control \$ 8.04	Instruction \$ 52.98	Operation \$ 6.59	Maintenance
Chehalis, Wash	69.89	4.49	55.85	6.28	\$ 1.86 1.56
Brunswick, Me	68.28	2.59 2.81	49.59 51.03	6.78 6.53	7.91 1.96
Harvey, Ill.		4.09	44.71 56.13	9.63	6.40
Average	12.00	4.00	30.13	8.11	3.02

In cities of 10,000 to 30,000 population, the average for current expenses in 70 cities is \$85.38; for general control, \$3.58; for operation of plant, \$10.37; and for maintenance of plant, \$3.74. (Tables V, VI, and VII.)

In cities of 2,500 to 10,000 population, the average for current expenses in 82 cities is \$74.80; for general control, \$4; for operation of plant, \$8.11, and for maintenance of plant, \$3.02. (Tables VIII, IX, and X.)

The pamphlet sells at five cents per convended. In cities of 10,000 to 30,000 population, the

The pamphlet sells at five cents per copy and may be obtained from the Superintendent of Documents, Government Printing Office, Washington,

RURAL SCHOOLS DEFICIENT IN HYGIENE
The U. S. Bureau of Education, in a recent report, shows that small school buildings in rural communities in many instances continue to be erected without regard to modern methods of teaching or general hygienic considerations. This situation is attributed to the fact that rural com-

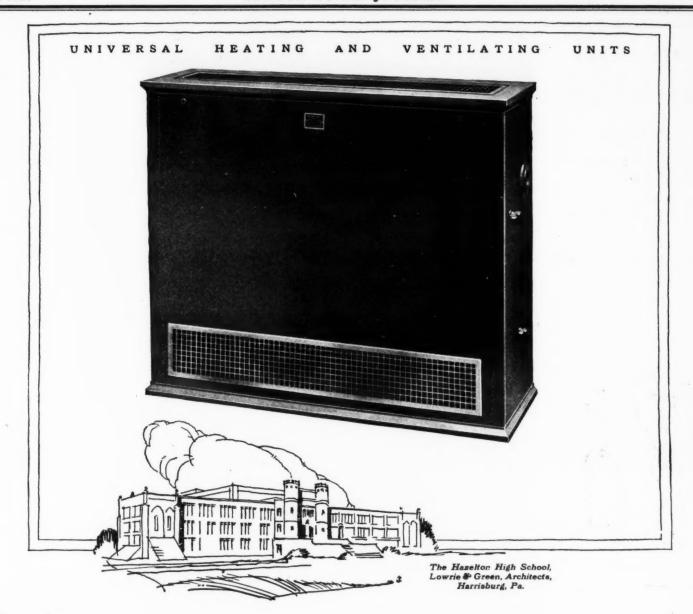
munities often cannot afford to employ a trained specialist in school architecture and the local builders and school trustees often are not familiar with modern standards for school buildings. Many states have attempted to remedy the situation by requiring that all plans for school buildings be submitted to the state board of health, the state architect, or the state education department. Increased knowledge of the effects which the

selection of a site, arrangement of rooms, sanitation, ventilation, heating, and general hygiene of a school building have on the health and school progress of children has practically revolutionized ideals in regard to building and equipping schoolhouses. Country children have apparently profited less from this knowledge than those in urban communities. This has been attributed in part to a lack of knowledge and general indifference in rural communities and in part to the financial aspect of the question.

Rural communities, it is found, build small schoolhouses which represent small sums of money and do not employ the services of a specialist in construction. Consequently, small school buildings in rural communities continue to be built without regard to appearance or to modern

demands of teaching or hygienic conditions. State laws, and state departments of education through the authority given them under special or

(Concluded on Page 108)



# When you approve the installation of Universal Units, you have definitely solved your heating and ventilating problem . . .

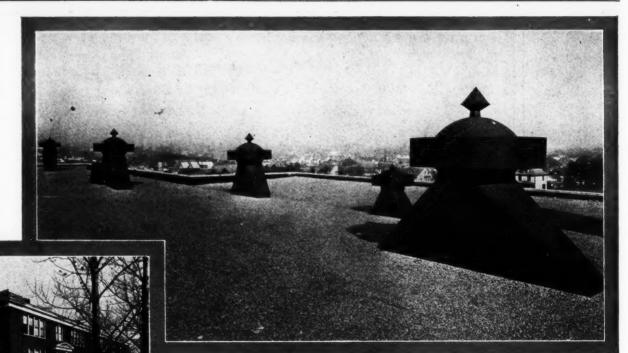
All over America today, in schools and other public buildings, authorities and engineers point to the quiet and satisfactory operation of Universal Heating and Ventilating Units — simple in design — yet highly efficient in operation — dependable from every angle—these economical heating and ventilating units are justifying their selection by school authorities. Of extra assurance to you in specifying Universal Heating and Ventilating Units is the knowledge that they are sold and guaranteed by the American Blower Company.

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## Standard Ventilation for the FINEST SCHOOLS



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Much has been said on the subject of "School Ventilation." The use of "GLOBE" Ventilators has brought harmony to many communities and silenced forever long-drawn-out discussions as to how the new school building is to be ventilated. Many architects who have been designing schools for years recommend and specify "GLOBES" as the standard ventilation for schools.

## Globe Ventilator Company

DEPARTMENT J

TROY, NEW YORK

(Concluded from Page 106)

general statutes, are making concerted efforts to promote better standards for rural school buildings. In some states this is being done through statutory provision to the effect that all plans for school buildings must be inspected by state officials, connected either with the state department of education or the state board of health.

In others, state appropriations are being made for building purposes, the apportionment going to districts whose financial condition is such as to make the provision of good buildings a hardship to the community. Sometimes money is loaned to school districts at a low rate of interest. Other states promote good buildings through a plan commonly called standardization of school buildings. Under this plan school buildings meeting certain prescribed requirements may receive state aid or a plate or other mark of distinction.

The experience of the states is that suitable, safe, and sanitary buildings may be best assured when there are state laws or regulations, and inspection by state authorities sufficient to give at least general supervision to the matter of the erection of school buildings. It is a fact that many new, as well as old, buildings are below the standard and injurious to the health of the occupants because of improper ventilation, poor lighting, or insanitary conditions which may be traced to a lack of the proper control by state authorities.

THE COST OF NORMAL-SCHOOL INSTRUCTION

The per capita cost of preparing teachers in the public teachers' colleges and normal schools varies greatly in the different states and in the different institutions. According to figures recently compiled by Mr. Frank M. Phillips, statistician of the U. S. Bureau of Education, the highest per-capita cost was \$613.19 in the New Mexico State Teachers' College, while the lowest per-capita cost was \$94.23 in the Central State Teachers' College of Oklahoma. In general, Mr. Phillips finds that percapita costs are higher in the small institutions and lower in those institutions which have a student enrollment of between 1,201 and 1,700 students.

In 90 teachers' colleges, the average per-capita cost per student enrolled upon a 36-week-year basis was \$296: the median was \$269, and the modal cost was \$243.

The per-capita costs for normal schools range from \$62.26 in the Georgia Normal and Agricultural College to \$1,037.79 in the State Normal School at Cheyney, Pa. In institutions with 100 or less students, the average per-capita cost is \$626.21; in those with 100 to 200 students, \$439; in those with 201 to 300 students, \$318; in those with 301 to 400 students, \$293; in those with 401 to 500 students, \$295; in those with 501 to 600 students, \$308; in those with 601 to 700 students, \$279; in those with 701 to 800 students, \$389; in those with more than 800 students, \$258. The average cost per pupil for the 93 institutions is approximately \$328; the median is \$303; and the modal is \$249.

SCHOOLS MAKE PROVISION FOR BRIGHT PUPILS

The U. S. Bureau of Education, in a report issued

The U. S. Bureau of Education, in a report issued on October 8, finds that systematic provision for meeting individual differences in pupils, especially in secondary schools, is being made by a majority of schools in the country. The old practice of placing an additional burden upon slow or failing pupils by requiring them to make up back work, is passing, for the experience has been that about 60 per cent of the pupils allowed conditional promotions are successful in maintaining their advanced resistion.

The bases of classification of pupils in the schools are reported to be in order of frequency: School marks, no plan, a composite of various factors, I. Q. as important factor, curriculum selected, and ability groups. The base "ability groups" includes those schools basing their classification on intelligence, achievement, and teachers' judgments. A composite of various factors includes those schools using some combination of such factors as school marks, intelligence, achievement, chronological age, social age, etc.

It is found that approximately three schools in four use some definite plan of pupil classification, and there appears to be no definite tendency to use any of the bases specified to the exclusion of others. There is agreement that pupils should be systematically classified into homogeneous groups, but there is little or no agreement as to the criterion of such classification.

The special provisions for individual differences reported are in order of frequency: No plan, coaching classes, conference periods, Batavia plan, supervised study, extra subjects, North Denver plan, and minimum and maximum courses. The majority of schools do make some systematic provision for meeting individual differences.

The schools seeking to set up special aids for bright pupils and specifically to provide for varying subject-matter requirements, are in a decided minority. It, therefore, seems that common practice in the administration of instruction seeks to raise the average achievement of the school through concentration upon the inferior pupil in an effort to get him over a common hurdle which the entire group must take.

The bases of promotion used are, in order of frequency: A composite of several factors, such as achievement and mental ability objectively determined through standard tests; school marks, teachers' judgments, and chronological age; daily records and examinations; and final examinations.

A substantial majority of schools, it is found, are using a composite factor involving objective and subjective measures. The individual factors entering into the composite base are so variably weighted by different schools that no statement concerning the weight given to individual factors is warranted.

With reference to time of promotion practice is about equally divided between one year and half-year promotion intervals. There is a minority practice, which is growing, of waiving fixed periods of promotion and promoting the pupil when promotion seems justified regardless of fixed periods. A practice of skipping or double promotion is also growing. Where this plan is used, it is usually dependent upon special tutoring and special examination, or upon extra session schools and examinations.

Paralleling the practice of double promotion, which is a provision for superior pupils, there is a growing practice of allowing pupils given a mark of condition or failure, a conditional promotion. Where a satisfactory quality of work is done in the advanced course, the condition of failure is removed. The experience of the schools is that about 60 per cent of pupils allowed conditional promotions are successful in maintaining their advanced positions.

The practice of grouping or not grouping homogeneously occurs with approximately the same fre-

(Concluded on Page 110)

# RESULTS COUNT MORE BINGHAMTON N. Y. ADOPTS HEATOVENTS

## FOR ITS THIRD NEW HIGH SCHOOL BLDG.



Christopher Columbus School erected in 1926 was equipped with forty-seven (47) Buckeye Heatovents.

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Heating Contractor

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East Junior High School erected in 1925 was equipped with forty-nine (49) Buckeye Heatovents.

Architects

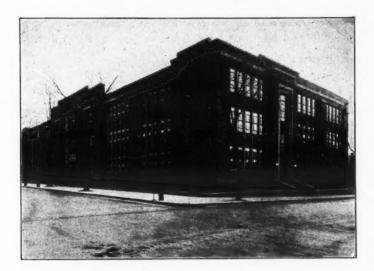
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BENJAMIN FRANKLIN School now under construction will be equipped with Forty-nine (49) Buckeye Heatovents. Heating Contract let to Gaylord & Eitapenc, Binghamton, N. Y. Architects, Conrad & Cummins, Binghamton, N. Y. (photo not yet available).

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Los Angeles, California, 1824 S. Hope St.
Milwaukee, Wis., 409 Loan & Trust Bldg.
Minneapolis, Minn., 416 Essex Bldg.
New York City, 1400 Broadway.

Newark, N. J., 403 Military Park Bldg.
Pittsburgh, Pa., 709 Columbia Bank Bldg.
Portland, Ore., Security Bldg.
Salt Lake City, U., 402 Scott Bldg.
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Skinner Junior High School, Denver, Colo.

North East High School, Minneapolis, Minn.

Chicago Public Schools

**Toronto Public Schools** 

East Side High School, Cincinnati, Ohio.

Cass Technical High School, Detroit, Mich.

Technical High School, Omaha, Nebr.

(Concluded from Page 108)

quency. Where pupils are grouped homogeneously the prevailing practice is to use a composite of several factors as a base. The factors usually in-volved are teachers' marks or estimates of ability, intelligence-test score, and achievement-test score.

Since more than 60 per cent of these schools enroll fewer than 100 pupils and provide for only one recitation section for each grade group, the practice of grouping homogeneously is about as widespread as the division of grades into recitation sections.

About one school in five still holds to grade completion based on an average of subject marks as a basis of promotion. One school in three promotes on a subject-completion basis as measured by teachers' marks and a slightly higher proportion of schools have either adopted an objective measure as a basis of promotion or have combined one or more objective measures with a subjective measure, usually teachers' estimates of ability or teachers' marks.

The schools quite commonly report some provision for curriculum enrichment for bright and capable pupils, and a minority report the use of minimum assignments and the outlining of minimum essentials for slow pupils. About two schools in three report that they do not permit junior high-school completion in less than the normal time required. There is a decided tendency to vary the subject-matter requirements and to enforce uniformity of time requirements in the junior high school. The prevailing practice in these schools concerns itself with curriculum enrichment for bright pupils. Commonly, enrichment is sought through extensive use of the project as a teaching device, permitting bright pupils to carry extra work, correlating extra class activities with curriculum work, granting school credit for outside work, and limiting drill to pupils who need it.

## AGE-GRADE STUDY OF 900 CITY-SCHOOL

Mr. Frank Phillips, statistician of the United States Bureau of Education, in a recent circular, offers a presentation of age-grade distributions in schools having twelve years of elementary and highschool work, those having eleven years of work, together with comparisons of the percentage underage, normal-age, and over-age children in city-school systems conducted on the 11-year plan, on the

12-year plan, and on the 13-year plan.
The study shows that in the 900 cities there are

The study shows that in the 900 cities there are 3,320,463 pupils on the 12-year plan, 216,856 white pupils on the 11-year plan, and 51,648 pupils on the 13-year plan. The table gives the age-grade distribution of those on the 12-year plan and of those on the 11-year plan, both reduced to the basis of 1,000,000 pupils for each plan.

It is shown that the highest enrollment by age in each case is in the 8-year-old group. The schools under the 11-year plan have higher percentages of enrollments than those of the 12-year plan for ages 7, 8, 9, 10, 11, and 12, and lower for all other ages. In another table are given the percentage of pupils under age, of normal age, and over age, by sex, size of city, and length of course. In every instance there is a higher percentage of girls than of boys in the under-age group and a higher percentage of boys than of girls in the over-age group. The 11-year-olds have fewer children in the under-The 11-year-olds have fewer children in the underage groups, and more in the over-age groups, than have those schools with a longer course. The figures are reversed for the 13-year schools.

Table 1 shows that the average age of the firstgrade pupils in the 11-year schools is 7.82 years, of pupils in the 12-year schools 7.02 years, and of pupils in the 12-year schools 6.58 years. For the second grade the average ages are 9.05, 8.22, and 7.84 years, respectively. The averages for the sixth grade are 12.91, 12.41, and 11.95; for the seventh grade, 13.85, 13.27, and 12.69 years. For

#### THE SCHOOL PRINCIPAL

Every well-trained and efficient principal accepts responsibility for doing everything in his power to create in his building at all times and especially at the opening of the year such a dynamic manifestation of the spirit of helpfulness as to make the new teacher on his staff—and especially the beginner—feel thoroughly at home in the happy comradeship of a group of congenial professional associates. The really successful principal is one who can quickly and completely win for his organization the professional loyalty of all who join his instructional staff. There is an element of tragedy in the way in which—the speed with which—some otherwise efficient principals lose the confidence of beginning teachers.—Ambrose L. Suhrie, New York University.

the eighth grade in the 12-year and 13-year schools, the average ages are 14.11 and 13.51; for the ninth grade of the 13-year schools, the average age is 14.32 years.

For the first year of the high school, the average ages are 14.79, 15.02, and 15.17; for the second year, 15.58, 15.94, and 16.16; for the third year, 16.59, 16.89, and 16.97; and for the fourth, or senior year of the high school, the average ages are 17.51, 17.85, and 18.01 years. The figures indicate that the average age of a graduate of the 11-year schools at the time of graduation would be about 18 years, for the 12-year schools, 18.4 years, and for the 13-

year schools, 18.5 years.

The average difference in age for a grade in the 11-year schools is 0.96 years, for the 12-year schools it is 0.93 years, and for the 13-year schools, 0.92 years. It is noted that there are more pupils over age in the lower grades than in the upper grades. and as these drop out faster than do those of normal age or of under age, the average ages do not increase as rapidly from grade to grade as it would if the over-age pupils remained in school.

#### SCHOOL ENROLLMENT CHANGES

-Elementary-school enrollments have not kept pace with the increase in population since 1890, but secondary enrollments have increased at a rate approximately twelve times that of the total population, according to a recent study made by the

United States bureau of education.

The report shows that the rate of increase of the high-school enrollment is 20 times that for the total population. From 1895 to 1905 public secondary education obviously grew in part at the expense of private high schools and academies. Since 1905 private secondary education has recovered, and while not even approximating the growth of secondary education has nevertheless acquired a rate of increase which is higher than that of the total

It is pointed out that the fact that elementaryschool enrollments have not kept pace with populaincrease does not mean that failure to enroll as high percentages of those of elementary-school age in school. The percentages have slowly increased at each census period. The failure in this department of the schools has been attributed to a falling birthrate and to faster grade progress which sends children into the secondary schools at an earlier age.



# Now-a new standard of quietness in unit ventilator operation

QUIET—where is it more essential than in the schoolroom? And it is to the schoolroom that this New Model Sturtevant brings a new standard of quietness in unit ventilation.

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The fan wheels of the New Model Sturtevant are fifty per cent larger in diameter than those used in other The nearest office below is at you service and will gladly send you copy of our Bulletin No. 344-A.

makes for the same rating. For this reason they can be run very slowly; the air moves with a low velocity and noiselessly. An added advantage gained through the use of these slow speed fans is a saving in electric power.

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Sturlevant the Unit Ventilator

## Two Replies to: Beware of Too Much Theory

(Concluded from Page 48)

Getting a Variety of Viewpoints

A variety of viewpoints is essential to good thinking and one gets these from attendance at summer sessions and conferences. Why shouldn't a superintendent be justified in being anxious that his teachers get a regular amount of professional study?

Speaking for the majority of young superintendents, I believe, I may say this: We want to be progressive. We want better schools than those of yesteryears. We are giving of our time and effort to make these things possible.

It will take more opposition than the writer's statement that our knowledge is as sounding brass and tinkling cymbals, to discourage us in the work we have undertaken.

The world needs youthful leaders today as never before. Who is better fitted by age and training to understand the problems of modern youth than a youthful superintendent?

## IN DEFENSE OF THE YOUNG SUPERINTENDENT

L. W. Coquillette, M.A., Superintendent, Kenwood Park Public Schools, Cedar Rapids, Iowa

In the September number of The American School Board Journal appears an article, "Beware of Too Much Theory," written by a former teacher and school-board member. I feel that this article should not be passed by without something being said in defense of the younger men in this profession.

The reasoning of this article is of the syllogistic type, wherein the writer has assumed his own premises and proves his points to his own satisfaction. He has nothing to back him up with the exception of his own dogmatic ideas. To say: All young superintendents are theoretical (whatever this means); here is a young superintendent; therefore, he is theoretical and should not be hired, is hardly a fair criterion by which a board of education should select an administrator. Yet, the writer of this article goes on to say that, no matter how capable a young man is, he should not be hired because he will be too theoretical, for the simple reason that he is classed in the general category of young superintendents who are always theoretical.

#### Applying the Scientific Method to Teaching Profession

Educators have at last begun to apply the same principles to their profession as have the other professions. The value of the scientific method applied to educational problems, and the research department of the colleges of education in our great universities have opened the way to a clear understanding of school administration. To object to a superintendent because he stresses college degrees and summerschool attendance is indeed to be deplored. It is in these professional college courses that the administrator and teacher are brought in contact with the results of certain kinds of teaching and administration that have been tried out in the experimental schools maintained for this purpose.

This sort of work in summer school obviates the necessity of the school administrator experimenting in his own school. Here are the results of certain educational experiments presented in a scientific way, treated statistically, and subjected to the best possible criticism by leading educators. Whether they will work or not, does not need to be speculated upon; they have been tried under the most exacting conditions.

#### Favoring the Trial-and-Error Method

Contrast the above with the writer of "Beware of Too Much Theory," who in defense of men with years of experience gained in the field,

favors the old time-worn method of trial and error. What the administrator does pick up in his years of experience are those things that work and those that do not. Sometime in his career he has made mistakes, sometime again he will make other mistakes. The trial-and-error method is founded on mistakes and successes. The teacher or administrator may find out in a single summer-session course, as the result of some one's experiment, what it would take them years to discover through the slow process of trial-and-error.

The author of "Beware of Too Much Theory," first accuses the young superintendent as having "an itch for experimentation and brimful of new theories," then in a later paragraph he accuses him of "Making no opportunities to verify his theories." Here the poor young superintendent is indeed placed in a most unfortunate circumstance. He is first accused of too much experimentation, then is further condemned for not trying to verify his theories. The reasoning used by the author of this article is most unreliable.

#### Keeping Up With Progress in School Administration

The work of the modern school administrator is growing. Education must keep up with the progress in other phases of the world's civilization, or be forever lost. This work must be carried out by men who are keen to see the changes, and not afraid to venture from the old, narrow paths to those which seem most necessary in having education keep up with other progress. Business puts no mark of censure on the executive who, after studying the situation, launches out on new ventures. Why should a school superintendent be frowned upon because he is young and consequently too theoretical?

If all things learned in college and summer school are wrong and sound administration must come up through the routine of experience, then the time and effort spent by colleges of education, research done by graduate students, and the books on education written by educational authorities, are a waste of time and should be scrapped as worthless.

Young Superintendent Not in General Class

It is very true that schools cannot be run on theory alone; no one attempts to do it. My contention is that young superintendents are not theoretical, and cannot be placed in a general classification as the writer of "Beware of Too Much Theory" has done. I contend that the work of the summer schools is the presentation of more scientific experimentation than theory. If the young superintendent is capable and thoroughly versed in his profession he should be given the same opportunities as the older man, who has learned the same things through years of trial and error in the field.

The writer of "Beware of Too Much Theory" is dealing in metaphysical rather than real things. He is accepting his own deductions too blindly and shows no sound proof of his contentions. Today, we require sound facts derived from scientific investigations, not the blind statements of one dogmatic individual.

## CREATING SCHOOL BOARDS IN PENNSYLVANIA

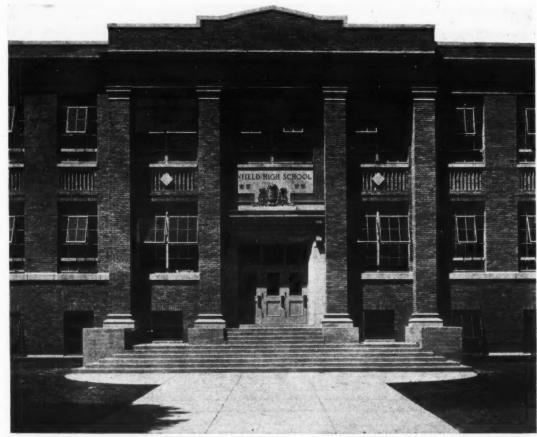
The method of creating school boards in Pennsylvania is explained by the Public Education Association of Pennsylvania as follows:

1. In Pennsylvania, school directors are chosen at a regular municipal election at which other officers are elected. Several states elect school directors at a special election, when only school directors are elected, thus focusing attention upon school affairs and preventing trading and other tricks of political manipulation. In such states nominations are made by petition and are nonpartisan.

2. In two cities of Pennsylvania (Philadelphia and Pittsburgh) school directors are appointed by the judges of the Courts of Common Pleas. The theory of different procedure in these two cities seems to be that to nominate and elect school directors in the same manner as other municipal officeholders, would bring the same dictation by political bosses, and would result in the election of unfit persons.

That political pressure has often been exerted in behalf of certain aspirants for these positions is well known. It is true, on the other hand, that when a large, united, and disinterested public opinion has been brought to bear upon the judges in favor of a certain exceptionally

(Concluded on Page 144)



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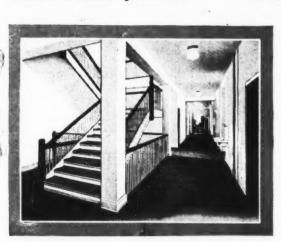
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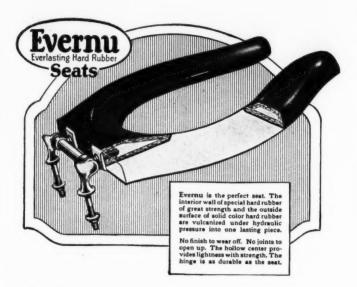
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Education Costs in District of Columbia
The District of Columbia, according to a recent
study by the U. S. Bureau of Education, expends \$120.87 each year per child in its school system. Eighteen cities only, out of 247 from which data were obtained, spend a larger amount. The figures are for current expenses only, and are for each child

in average daily attendance. The average cost per child in 35 cities of 100,000 population and over was \$104.82. The average for 60 cities of 30,000 to 100,000 population was \$92.85. The average for 70 cities of 10,000 to 30,000 population was \$85.38. The average for 82 cities of 2,500 to 10,000 population was \$74.80.

The range in costs in these four groups was respectively: \$145.55 to \$57.83; \$138.54 to \$40.37; \$175.36 to \$85.38; and \$166.93 to \$74.80

New Teachers' Pension Ruling in Washington,

D. C.
The commissioners of the District of Columbia have prescribed the following rules and regulations for the payment of teachers' optional benefits under service and disability retirements:

"Any member may elect to receive his retirement allowance in the form of monthly payments for life. or, he may elect to receive the portion of his retirement allowance which has been purchased with his own contributions, in the form of a reduced monthly allowance payable throughout life with the pro-

If he dies before he has received in payment of the annuity purchased by his own contributions, an amount equal to the full amount contributed by him to the teachers' retirement fund since March 15, 1920, with the interest credited thereon to the date of retirement, the balance shall be paid to his legal representatives or to such person as he shall designate in writing, duly acknowledged and filed with the commissioners of the District of Columbia. (The beneficiary may be changed at any time after retirement under this

"Option 2. Upon his retirement, the annuity purchased by his own contributions shall be converted into an annuity of smaller amount, but of equivalent value, payable throughout his lifetime and at his death to be continued throughout the lifetime of such person as he shall have designated in writing, duly acknowledged and filed with the commissioners of the District of Columbia at the time of his retirement. (No change can be made in the designated beneficiary and no refund can be made of any part of the teacher's contribution under this option.)

Tuition in District of Columbia Public Schools The following rates of tuition for nonresident pupils attending the public schools of the District

of Columbia computed in accordance with the requirements of the Act of Congress approved June 26, 1912, as amended, have been approved by the board of education and by the district commissioners:

> Normal schools ......\$183.67 Senior high schools .......... 131.13 Junior high schools ...... 116.44 Elementary schools ..... 67.24 Vacation schools ..... Night schools .....

These rates of tuition are effective for two years ending June 30, 1929.

Age Limit for Normal-School Students A precedent for admission of students to the Dis-trict of Columbia Normal Schools has been set by the school board in a recent decision refusing an application for admission received from a woman 47 years of age. She could not be accepted as a prospective teacher in the Washington schools as she is already over the age limit (40 years) for entrance into the school-system service.

She applied, however, for admission, waiving all rights to a teaching position in the district upon completion of the course. Admission was refused on the ground that appropriations to the district normal schools are made for the sole purpose of preparing teachers for the district school system and that, therefore, only persons may be admitted to the schools who will possess, upon graduation, all the prescribed qualifications for entering the teaching staff, and who intend to do so.

Outside Occupations of Washington Teachers
Three requests for permission to engage in un-

usual outside professions recently granted by the school board of the District of Columbia bring to public notice the regulations of the Board in regard to such activities. These requests were from a teacher of sheetmetal work and a teacher of domestic science, both of whom wish to be chiropractors after school hours, and a teacher of drawing who desires to practice dentistry.

The regulation of the board is as follows: "No employee of the board of education shall perform service for pecuniary or other considerations, except during vacations, in any business, trade or occupation, without having first obtained the written consent of the superintendent of schools.

"Such permission shall expire at the end of the

year in which it is granted, unless renewed in writing by the superintendent of schools.

"Applications of employees to practice special professions shall be referred by the superintendent of schools to the board for its action."

Secondary Schools in Southern States
A report on southern secondary schools accredited
by the Association of Colleges and Secondary Schools of the Southern States, will be published in the near future by the United States Bureau of Education. It is a digest of an exhaustive study made by Dr. Joseph Roemer, Secretary of the Association's Commission on Secondary Schools. made with the approval of the association, under the auspices of the National Committee on Research in Secondary Education.

The characteristics of the schools will be set forth in considerable detail in the bureau report, and a comparison made between those in the southern secondary schools and those in the schools of the northcentral association.

District of Columbia Exchanges Teachers

A decision of the Controller of the Treasury of the United States, just passed, will be of benefit to the Washington school system in promoting its plan of exchanging teachers with other cities. The district, for several years, has exchanged teachers with other school systems for a year's time. It has been found very beneficial in giving Washington teachers an opportunity to work in other sections of the country and in bringing back to the city successful methods which have been found in other places. The alternates from other parts of the country

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coming to Washington have benefited personally from a year's residence in the city, but in addition they have brought many suggestions to the Washington schools and teachers with whom they came in contact.

The plan has been retarded somewhat by the fact that, under a ruling of the district auditor, Washington teachers going elsewhere, under this exchange arrangement, have lost a year's credit for longevity pay purposes. The ruling of the Controller of the Treasury reverses the ruling of the District Auditor. The year spent in schools outside of the District now counts as a year spent in the District

The case was brought before the Controller by one of the women teachers pleading for a year-longevity-pay-increase withheld because she was on a leave of absence for a year while teaching in the schools of California, a California teacher taking her school in the district. In his decision the Controller held that the act of Congress of June 4, 1924, established basic salaries for the various groups of teachers in the district public schools, authorized credit for previous teaching experience in other schools in the longevity placement of new appointees as well as those who were in the service July 1, 1924, and that under this statute a new appointee receiving a permanent appointment at the same time that that teacher resumed her duties in the district schools after a year's leave would have been entitled to credit for all previous teaching experience.

#### Public Evening Schools for Adults

L. R. Alderman, Specialist in Adult Education in the U. S. Bureau of Education, has completed a study of the enrollment in public evening schools. He finds that in 1910 the total enrollment was approximately 135,000, while in 1924 it was nearly 945,000. This is a much more rapid growth than in public high schools, for instance, where the enrollment in the same time increased practically 300 per cent. He finds the following reasons indicate the motives for attending night schools, these being reasons stated by students in night schools:

- To make up for educational opportunity lost in childhood.
- To acquire additional culture and refinement.
   To prepare for college or professional schools.
- 4. To prepare for entrance, or for advance, in commerce, trade, or industry.

- 5. To qualify for newer or better vocations,
- higher and richer fields of endeavor.
  6. To improve in all the arts and sciences of the
- 7. To seek guidance in adjustment to the land of their adoption.
- 8. To seek relaxation and change from daily pursuits.
- 9. To seek to preserve or restore health through systematic, supervised, and directed physical education and exercise.

Personnel Changes in the District of Columbia Miss M. G. Young has been appointed administrative principal of the Peabody-Hilton-Carbery elementary-school group. Miss Josephine Burke, for many years principal of the John Eaton School, has been retired and the vacancy filled by the transfer of Miss C. A. D. Luebkert, whose place in turn as principal of the Cranch-Tyler School, has been filled by Miss H. M. Knighton. The vacancy at the Madison School has been filled by Miss C. I. Mathis. Standard Blackboards

Secretary Hoover has succeeded in getting the manufacturers and wholesalers of blackboards for school use to agree upon a limited number of boards in standard sizes. The agreement means that beginning April 1, 1928, composition blackboards will be reduced in variety from three colors to one color; from 18 widths to 8 widths; and from 90 lengths to 13 lengths.

The program will be followed for one year. The sizes to be manufactured the following years will depend upon the working out of the plan for the period just stated.

Acoustical Plaster

A plaster which will absorb ten to fifteen per cent of the sound striking it will remedy the acoustical defects of most of the auditoriums, theaters, and churches having such defects. An investigation is in progress at the U. S. Bureau of Standards, with the object of developing such a plaster, and considerable success is being met.

To absorb any appreciable amount of sound energy, a plaster must possess a porous surface of such a nature that the sound will penetrate into the plaster and be changed to some other form of energy. The hard, nonporous surface possessed by the ordinary sanded plaster or by the lime-gypsum white finish coat does not have this porosity; hence, practically all sound striking a plaster of this kind is reflected back into the room. This condition

gives rise to the objectionable echoes and reverberations which are so often found in public buildings.

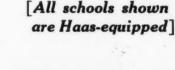
There are at present several acoustical plasters on the market, which possess the desired property of porosity. With most of them this effect is produced by using a porous aggregate, such as pumice. It is necessary, however, with plasters of this type to use a very closely graded aggregate of fairly large particle size. This results in a somewhat harsh working plaster which is difficult of application and which must be applied with great care and considerable skill in order not to destroy the desired surface.

By adding small amounts of alum or aluminum sulphate and a carbonate (CaCO<sub>3</sub>, for example) to the calcined gypsum-sand dry mix it has been found that a plaster may be prepared which possesses the desired characteristics of surface porosity and which may be easily worked and applied. When this plaster is wetted, the alum and carbonate react to form carbon dioxide, CO<sub>2</sub>, which is entrapped in the body of the plaster in the form of countless minute bubbles of gas.

When the plaster is applied to a water-absorptive backing, such as an ordinary scratch or brown coat of plaster, the excess water in the wet acoustical plaster is partially removed by the absorptive effect of the backing and the water films surrounding the gas bubbles are broken, leaving a large number of communicating small pores throughout the plaster. These small gas bubbles also serve another purpose in increasing the ease of workability of the plaster and thus make it easier to apply.

Experiments have been made with many different types of aggregate in an effort to find the most satisfactory one for use. Among those investigated, pumice, calcined diatomaceous earth, and tufa stone produced the most satisfactory plasters. A plaster containing 2 parts granulated tufa, graded to pass a No. 14 and be retained on a No. 40 sieve; 1 part sand, graded from sieve No. 10 to sieve No. 30; and 1 part of calcined gypsum, to which was added 2 per cent by weight of the calcined gypsum of a mixture of calcium carbonate and potassium alum in molecular proportions, and retarder had mately the sound-absorbing properties desired. is possible to increase the percentage of sound absorption by increasing the tufa-calcined gypsum ratio, increasing the tufa-sand ratio, or increasing the particle size of the aggregate. Certain details, backing, etc., are now being given consideration.

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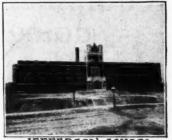




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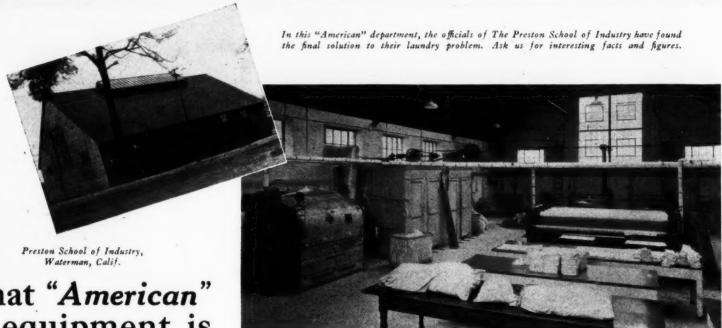
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## PERSONAL NOTES OF SCHOOL SUPERINTENDENTS

—F. W. Henselmeier is the new principal of the union high school at Elsinore, Calif. He was connected with the school system of San Bernardino, Calif. The Elsinore school board is composed of Thomas Wilkes, president; Rev. C. R. Garver, clerk; Everett Root, Roy Roripaugh, and Mrs. A.

clerk; Everett Root, Roy Roripaugh, and Mrs. A. S. Burnham.

—James H. Park has been named supervising principal of the schools of Orlando, Florida. He is a graduate of the University of Georgia and comes from a family of teachers. His grandfather, Dr. James F. Park, was principal of the Park High School at Tuskegee, Alabama.

—Mr. Jason S. Hoffman, superintendent of schools of Hunterdon county, New Jersey, died at a Plainfield hospital on September 3, following an operation for a hip ailment. Mr. Hoffman was 68 years of age.

years of age.

Mr. Hoffman was a graduate of Rutgers College,
New Brunswick, New Jersey.

Following his graduation, he served as a teacher in Hunterdon county uation, he served as a teacher in Hunterdon county and later at New Hampton. In 1895 he was appointed county superintendent of schools. Mr. Hoffman's success in this position was widely recognized and for a number of years Teachers College of Columbia University used the county-school system as a laboratory of observation for its advanced students. The affiliation brought the schools into the limelight and visitors from all parts of the country and from all parts of the world inspected the rural schools of Hunterdon county. Mr. Hoffman organized the rural-school festivals which Hoffman organized the rural-school festivals which later proved a source of information for the adults, as well as an inspiration for the children. He was also instrumental in the establishment of the better-language club, the county health club, and the group system for one-teacher rural schools. Mr. Hoffman was an advocate of consolidated rural schools and was responsible for a change in the

method of distributing the state school money.

—Mr. J. R. Crawley, who was appointed to serve as director of elementary and high-school inspection in Indiana, has resigned and returned to the superof the Decatur county schools i

which he came. -Mr. E. B. Butler, formerly assistant director of elementary and high-school inspection in Indiana, has been appointed director of the work, to succeed Mr. J. R. Crawley. Mr. J. S. Hussey has been appointed as assistant inspector, to succeed Mr.

—Miss Elma Olson, who for four years was director of the bureau of educational counsel of the La Salle-Peru Township High School and Junior College, La Salle, Illinois, has been appointed to the student-personnel department at Yale University. Miss Lila McNutt of St. Louis, Mo., has been appointed to succeed Miss Olson.

-Dr. Philip L. Riley, of the department of health of the Massachusetts Institute of Technology, has been appointed director of health education in the

public schools of Cleveland.

--Mr. Wayne W. Curfman, formerly assistant superintendent of schools at Lincoln, Nebraska, has been elected superintendent of schools at Lawrence, Kans. Mr. Curfman succeeds Mr. H. P. Smith, who

has gone to Syracuse University at Syracuse, N. Y.

-Mr. Clifford E. Reichard has been appointed assistant superintendent of schools at Minneapolis, Minn. The appointment which became effective the

past summer, carries a salary of \$3,000 per year.

—Mr. W. A. Newlin, formerly head of the mathematics department in the Pasadena, Calif., High School and Junior College, has been elected dean of

the College.

—Mr. Emmett Clark, formerly principal of the Kauffman Junior High School at Pomona, Calif., has been elected superintendent of schools. -Mr. E. E. Bratcher has been elected superin-

tedent of schools at Shelbyville, Ky., to succeed J. H. Muntz. Mr. Bratcher is a graduate of the University of Kentucky, the University of Chicago, and Cornell University. He has had fifteen years' ex-perience as a superintendent and was a member of the Kentucky University faculty last year.

-Mr. Samuel E. Burr, formerly supervising principal of the public schools of Lawrence township, Lawrenceville, New Jersey, has become director of research in the public schools of Lynn, Mass. Mr. Burr is a graduate of Rutgers College and holds the degree of Litt.B. He was an instructor in the high schools of Bordentown and Trenth, and later became principal of the high school at Lambertville. In September, 1925, he was appointed supervising principal of the Lawrence township schools. During his period of service, Mr. Burr was responsible for the recent survey of the Lawrence township schools, a report of which has been issued in book form.

—Mr. Chester Robbins, formerly principal of the Bridgeton, New Jersey, high school, has been elected

superintendent of schools, to succeed Mr. C. C. Hitchcock. Mr. Robbins is a graduate of Ursinus College and has completed a course in postgraduate work.

V. Turner has been elected for his seventh year to the superintendency of the Utica, Oklahoma, schools.

-Harry Williams has been appointed principal of the school at Craigville, Indiana.

—Charles Phillips is the new principal at the Hillside, California, public school. He is a native of Illinois.

—Dr. John Guy Fowlkes has returned to the University of Wisconsin as professor of education instead of associate professor of education, after having spent a year on leave of absence at the University of California.

 —Mr. F. G. Horner has been elected superintendent of schools at Tamaqua, Pa., to succeed J. F. Deer.

Derr.

-Miss Lulu L. Pickett has been elected superintendent of schools at Superior, Wis., to succeed P. R. Spencer.

-Mr. W. T. Rowland has been elected superintendent of schools at Marianna, Ark., to succeed N. M. Irby.

—Mr. C. M. Sly has been elected superintendent

of schools at Anchorage, Alaska.

—Mr. H. E. Moore has been elected superintendent of schools at Fairbanks, Alaska.

ent of schools at Fairbanks, Alaska.

—Mr. O. L. Paupanger, superintendent of schools at Bloomington, Minn., has been elected secretary-treasurer of the Minnesota Izaak Walton League.

—Mr. C. A. Pfeiffer, formerly business manager of the Iron River, Mich., school district, has been elected superintendent of schools, at a salary of \$3.800. \$3,800. Mr. John Morgan has been elected to succeed Mr. Pfeiffer as business manager.

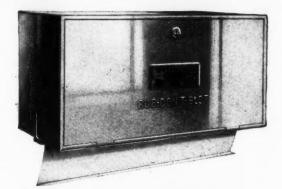
-Mr. R. W. Maxson of West New York, N. J., died in a local hospital on September 15, after an illness of several weeks.

-Mr. Eugene Butler has been elected state highschool inspector for Indiana.

-J. R. Cougill, who has served as superintendent of schools at Chariton, Iowa, for the past seven vears, was unanimously reelected for a period of three years at a salary of \$3,900, an increase of \$300 per year.

-The custom of buying supplies for the schools on credit has been stopped by the school board of

(Concluded on Page 120)



This Cabinet Dispenses

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One hundred and fifty towels are locked in the cabinet and are pulled out one at a time until the cabinet is empty.

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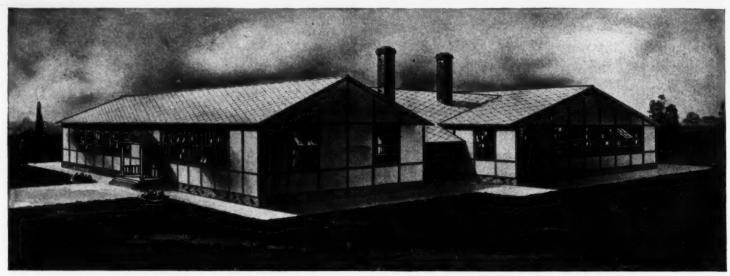
construction, having no wheels, springs or other mechanism to get out of order. The tissue is drawn from them two sheets at a time, the slight resistance involved preventing needless and wasteful withdrawal. The soft, absorbent character of the tissue, and the automatic economy necessitated by the cabinet, effect savings.



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Oklahoma City, Okla. Hereafter no debt can be contracted unless specially authorized by the board.

—Dr. William M. Robinson, formerly associate specialist in rural education in the U. S. Bureau of Education, has taken up h's work as head of the rural education department in the Weştern State Teachers' College, Kalamazoo, Michigan.

State Teachers' College, Kalamazoo, Michigan.
—Mr. A. W. Clevenger, formerly superintendent
of schools at Wakefield, Michigan, has recently become state high-school inspector for the University
of Michigan.

—State Supt. W. J. Cooper of California has announced the organization of a supervisory council which is to work in cooperation with the division of research of the state education department. The committee consists of Dean W. W. Kemp, of the school of education, University of California; Dean E. P. Cubberley, of the school of education, Stanford University; Dean Lester B. Rogers, of the school of education, University of Southern California; Mr. George C. Jensen, director of research for the California Teachers' Association, and Mr. Walter E. Morgan, assistant superintendent in charge of the division of research and statistics.

—Mr. Chester Robbins, formerly principal of the Bridgeton, New Jersey, High School, has been elected superintendent of schools, to succeed C. C. Hitchoock

—Mr. L. B. Evans, superintendent of schools of Augusta, Ga., has been traveling in Europe as a member of the mission of the Carnegie Foundation for the Advancement of International Peace. Mr. Evans resumes his schoolwork about the first of November.

—Mr. S. D. Copeland, formerly principal of the Houghton School at Augusta, Ga., has been elected as assistant superintendent in charge of elementary

instruction.

—Dr. Alexander C. Roberts, for the last seventeen years a leader in educational work in Washington, has assumed the position of president of the San Francisco State Teachers' College, to which he was appointed in August. Dr. Roberts has had extensive experience in schoolwork, having acted as principal, superintendent, and normal-school director. He was a member of the Washington University faculty for the last six years.

University faculty for the last six years.

—Mr. Joseph C. Brown has been appointed as president of the Northern Illinois Teachers' College, to succeed Mr. J. Stanley Brown, resigned. Mr. Brown was for a number of years a member

of the faculty of the Eastern Illinois Teachers' College. He was president of the Teachers' College at St. Cloud, Minnesota, previous to accepting his present position.

present position.

—Mr. F. C. Schwartz has been elected superin-

tendent of schools at Wadena, Minn.
—Mr. Walter Bramhall of Scranton, Jowa, has

been elected superintendent of schools at Blencoe.

—The New York State Education Department bas announced a number of changes in the department which became effective during the summer.

These include the appointment of Mr. W. G. Kimmel as supervisor of social studies, Mr. Clarence E. Baer as supervisor of science, and Miss Helen H. Heyl as assistant in the rural education bureau. Mr. Baer brings to his new position an extensive training and wide experience. He is a graduate of Cornell University and completed his postgradu-

ate work in the University of Chicago, the University of California, and Columbia University.

Mr. Kimmel is a graduate of Dickinson College and holds a degree given by the University of Chicago. He was formerly instructor of social

studies at Latrobe, Pa., and at the University of Chicago High School.

Miss Heyl has had considerable experience in the rural-school field, having been active as teacher, principal, and supervisor of rural schools, and also as assistant in rural-school experimentation at Teachers' College. Miss Heyl is a graduate of the Harrisonburg, Virginia, Normal School and completed her postgraduate work at the University of Virginia. She holds a B.S. degree given by Teachers' College, Columbia University, also a special diploma in supervision, and has completed major work in rural education, including admin stration,

-Mr. Austin R. Coulson has been appointed as deputy superintendent of schools at Albany, N. Y.

supervision, and curriculum research.

—Mr. Arthur G. Clement, who retired last fall as supervisor of biologic and general science in the New York State education department, died in July. Mr. Clement had completed 31 years of service in the department and was known for his sound scientific knowledge. He was a graduate of the University of Rochester and held two degrees given by that institution.

—Supt. Frank Cody of Detroit, Mich., has been reelected for a three-year term, at a salary of \$16,000 for the first year, \$17,000 for the second, and \$18,000 for the third.

—The supervisory work of the Wisconsin State Education Department has been reorganized with the opening of the new school year. Mr. W. J. Osburn, formerly in the division of educational tests and measurements, has been appointed to take over a large part of Mr. Hans Schmidt's work as high-school inspector. The demands of Wisconsin school districts for assistance in building problems has made it necessary for Mr. Schmidt to give the larger part of his time to this work. While the department of tests and measurements has been abolished as a regular department, questions relating to this work will be handled upon request.

—Mr. Roy W. Cloud, formerly superintendent of schools at Redwood City, California, has accepted the secretaryship of the California State Association. Mr. Cloud was especially successful as a city superintendent and it is expected that in his new work he will exhibit those qualities of successful administration which have been so ably used in his schoolwork.

-Mr. E. S. Poling, assistant superintendent of the Central High School at Lima, Ohio, has been reelected as member of the city board of school examiners.

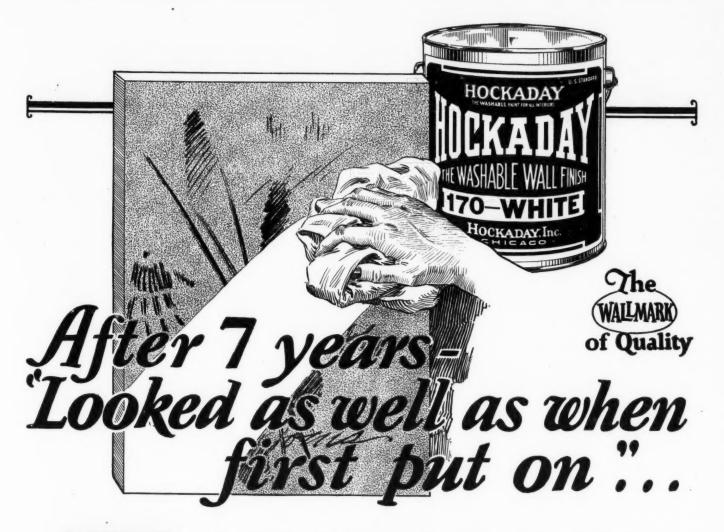
-Mr. P. H. Kimball has resigned as superintendent of schools at Brunswick, Maine, to become principal of the Washington county Normal School.

—Mr. Edgar G. Doudna, formerly secretary of the Wisconsin Teachers' Association, has been appointed to succeed William Kittle as secretary of the state board of normal regents. The appointment becomes effective December 1 and carries a salary of \$6,000 per annum.

-Mr. Earl H. Hanson is the new superintendent of schools at Orion, Illinois.

—Wyandotte, Mich. At the annual election of officers, Mr. M. W. Lacy was reelected as president of the board for his fourth term, and Mr. Edward Hass as secretary-treasurer for his eighth term. Other members of the board are Mr. John M. Griffith, Mr. Fred Van Alstyne, Mr. Henry C. Genthe, and Mr. Frank Armstrong.

—Alexandria, Ind. Dr. W. R. Thomas has been elected a member of the board of education, to succeed Mr. C. M. Robinson. Dr. Thomas is a former member of the board and was at one time a trustee of Monroe township.





Mr. George Schmidt, Superintendent of The Pure Oil Building, Chicago, and for seven years superintendent of The Chicago Trust Company Building.

So says Mr. George Schmidt, writing of his experience with Hockaday on the corridor walls of the Chicago Trust Company Building.

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Duriron acid-proof drain pipe is installed the same as cast iron soil pipe, and passes all plumbing codes. In fact many codes require Duriron for handling acid wastes.

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# NEWS OF THE SCHOOL BOARDS

AMONG BOARDS OF EDUCATION

—There is a movement on foot to increase the membership of the Proviso, Ill., board of education from five to seven members. The township includes Forest Park, Maywood, Melrose, Bellwood, and Hillside, but the towns are not all represented on the board. Besides, the difference in population makes it desirable that some of the units have more than one member. Leslie J. Smith of Forest Park, and Dr. E. C. Werninghaus of Melrose favor the increase.

—President J. Lewis Coath of the Chicago board of education has warned principals of schools that criticism of the board will not be tolerated and that those guilty are courting dismissal. "The school principals" he declared, "who are criticizing the actions of the school board and who are making trouble because of their own inefficiency will be brought up before the school-administration committee to explain their conduct if it continues. My experience has been that the type of principal who makes such statements is a weakling, with whom the organization can dispense without loss. I want teachers, not speechmakers, and I intend to have them if I have to replace certain teachers who have been making such statements."

—El Paso, Texas. The school board has adopted

—El Paso, Texas. The school board has adopted a tuition rate of \$5 a month for nonresident pupils in the kindergarten, in grades one to seven, and in the vocational school; in the senior high school, the tuition is \$10 a month, and in the eighth grade of the junior high school the rate is \$7.50 a month. The principal is authorized to add a monthly charge of fifty cents where the tuition matter is neglected by the patron and payment is delayed beyond the

tenth of the month.

Under a new law passed by the state legislature, high-school training is afforded each child in Texas without cost of tuition. Under the law, any pupil who has completed the course of study in his district applies to the county superintendent for transfer to some other district having advanced work. If the superintendent approves the application, the pupil's home district must pay to the other district the cost of tuition for the pupil, or the superin-

tendent may draw upon a special fund appropriated by the legislature. A charge of \$5 a month has been fixed as the limit which one district may charge another for any transferred pupil.

charge another for any transferred pupil.

—Dubuque, Iowa. The school board has adopted a new policy governing the collection of tuition. In the past, no definite attempt was made to collect tuition from nonresident pupils below the senior high school. Under a new policy, the board will collect tuition from all nonresident pupils. In most cases it is possible to collect the high-school tuition direct from the local district boards in the surrounding country. In districts which maintain eight-grade schools of their own, it is necessary to

collect the tuition from the parents.

—During the past year new cafeterias were placed in operation in two of the junior high schools at Baltimore, Maryland. The addition to the junior high school No. 70 is completed and the cafeteria there was opened during the fall term.

A supervising dietitian has been employed who has been given the task of carrying out a definite centralized system of accounting and purchasing. Through combined buying for all cafeterias it is believed possible to effect considerable savings and incidentally to provide for necessary expense, maintenance, and depreciation of cafeterias. Provision has been made for the regular medical examination of all employees in the cafeteria service, and workmen's compensation and insurance has been taken out to cover all persons handling cafeteria funds. In addition to this, an efficient banking system has been developed whereby one of the banks makes regular collections from each cafeteria. It is planned to purchase a truck to be used in the delivery of supplies purchased from the wholesale markets.

—A resolution supporting William McAndrew, Chicago school superinterdent on trial for insubordination, was passed by 422 New York educators on October 5. The educators were in attendance at the annual meeting of the New York State Council, of which Mr. McAndrew was formerly president. The resolution condemned the "assault upon the fundamental business of education represented in the current attack" and deplored "the bad effect of such procedure."

—Dr. John S. Hall, for more than ten years a member of the board of education of Detroit. Michigan, has resigned in order to become a candidate for mayor of the city. —The state of California has issued new rules for the registration of minors in the state, beginning with October. The state education department and the state health department have both issued blank forms and instruction sheets for use in the registration of minor pupils.

tion of minor pupils.

—Elgin, Ill. The school board has adopted a rule that no high-school student who lives less than twelve blocks from a school may park an automobile near the school building. It was pointed out that parked cars interfere with traffic and are often the cause of accidents.

—Duncan, Okla. Two members of the school board have been indicted on a charge of drawing a school warrant in excess of the amount appropriated. The case is being tried in the local court.

—Mr. A. P. Ortquist, formerly president of the school board of Minneapolis, Minn., died on September 28 at a local hospital. Mr. Ortquist, who was 61 years of age, had been ill almost a year. He was president of the school board from March, 1921, to July, 1926, and continued to serve as a member until last July.

—Student strikers at Emerson High School, Gary, Indiana, confronted the school board on September 27 and demanded the removal of 24 colored students. The strike had grown at that time until nearly 1,000 students had left the classrooms. Supt. W. A. Wirt suggested that the students return to their classes until a solution of the problem could be reached.

It appears that the Emerson School has been all white since its erection, despite the fact that the Froebel School has been evenly divided between colored and white pupils since 1916. The attendance of colored pupils became necessary through a redistricting of the city. Supt. Wirt pointed out that, under the law, there is no chance of forcing the colored students out of the school, which is one of the largest in Indiana. There are at present more than 3,000 colored students in Gary, and all but 36 are segregated.

—Chicago. Ill. The school board has cooperated with city officials and civic forces in a campaign to safeguard school children from traffic accidents. It is pointed out that an average of a child a day is killed by automobiles during the school year.

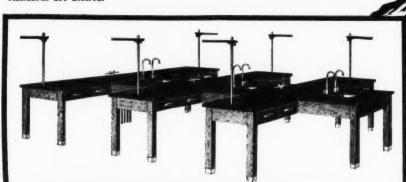
-Radio receiving sets will be installed in 35 schools to be erected in 1928, according to Mr. J.

(Continued on Page 125)

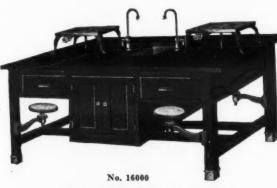
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Dubltowls are remarkably strong, yet soft. Soothing to the face. Dispensed from neat Dubltowl cabinet or your present standard size equipment. Size of sheet  $10\frac{3}{4} \times 10$  inches. 150 Dubltowls (300 sheets) to the package. 25 packages per carton.



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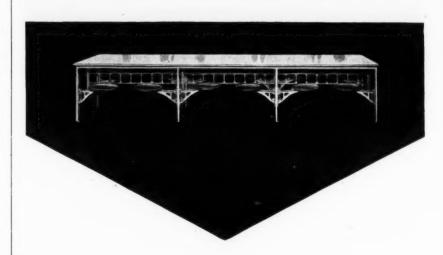
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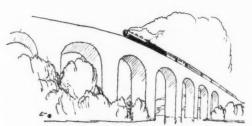
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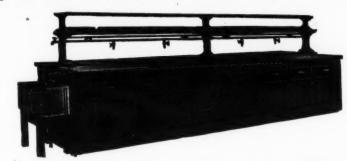
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CHICAGO, ILLINOIS.

(Continued from Page 122)

Lewis Coath, president of the Chicago board of education.

—Maple Park, Ill. The school board has adopted a rule which prohibits the use of automobiles by students during the noon hour. It appears that students who drive their own cars to school have been in the habit of loading the cars to capacity and then using the noon hour for a ride to the woods or to a nearby town. Under the new rule, automobiles driven to the school in the morning must remain at the school until the owner is ready to return home.

Owosso, Mich. The school board has prohibited hazing of freshman students by upper classmen of the high school. The action was taken to prevent injury to pupils.
Elkhorn, Wis. The board has raised the tui-

—Elkhorn, Wis. The board has raised the tuition rates for nonresident pupils to \$1 a week for the kindergarten and grades, and \$3 a week for high-school students.

—The board of education of Elmira, New York, will recover approximately \$4,000 under a decision of the acting state school commissioner, which upholds the board in charging a per-capita tax for suburban pupils who attend the local schools. It had been a custom of the board to charge an additional fee of \$35 for each student attending the schools from outside the city. This amount which had been paid in addition to the \$50 which the state paid the city, was afterward declared illegal and the case was taken to the state authorities for settlement.

—Supt. D. E. Wiedman of Bellingham, Wash.. has asked the board to make a building survey of the schools in order to determine definite needs of the schools in the way of accommodations.

the schools in the way of accommodations.

—Montgomery, Ala. The school board has approved a suggestion that a survey be made of the local school system, to involve a study of every phase of the educational needs of the city. In the survey, the emphasis will be placed on the building survey. The needs of the community in its school-huilding program will be expecially studied.

-Kansas City, Mo. The school board has been asked to make a survey of the school districts of the city with a view to rezoning the districts to avoid the crossing of heavy-traffic arteries by school children.

-San Diego, Calif. With the opening of the

schools in September, all senior high-school girls were attired in regulation uniforms consisting of white middy, black tie, and dark blue serge skirt.

The school board of Hastings, Nebraska, went on record as favoring the use of the school buildings for community affairs, so long as these do not interfere with the operations of the school.
 The board of education at Metuchen, N. J., has

—The board of education at Metuchen, N. J., has adopted a rule for regulating the taking of reexaminations by school children. Under the rule no examination will be given a pupil to remove a condition unless the pupil can produce a certificate from a licensed teacher stating that ten tutoring lessons have been given for each half year's work. No examination may be given unless the average for the year's work has been not less than 65 per cent.

—The total estimated enrollment of the Chicago schools on the opening day of the fall term was 535,000 to 540,000. The total last year was 521,786

—Peoria, Ill. High-school students have been warned against membership in secret societies. The board has ruled that any student known to be a member of a secret society will be barred from participation in any school event. The action is taken in compliance with a state law which prohibits students in the public schools from becoming members of these organizations.

—The new school-administration building at Berkeley, California, was occupied the early part of September. The building contains rooms for the storeroom department, the attendance department, the postoffice, switchboard, the business department, the administrative department, the board room, the parent-teacher association, and space for the supervisors and directors of the school system. The building was erected from plans prepared by Mr. James Plachek, and cost \$67,000.

—The board of education of Salina, Kansas, devoted a meeting to the question of safety for the school children. The board finds that on certain streets the traffic is congested and the crossings are quite dangerous. Steps will be taken to lessen

—At Marion, Ohio, County Superintendent Charles B. Rayburn has outlined a safety campaign. Under instructions given bus drivers, all vehicles must come to a stop before crossing railroads. Drivers also are instructed to exercise care in turning from a byroad to a main highway.

As an added precaution and constant reminder to the drivers of busses hauling school children, Superintendent Rayburn has had warning cards printed carrying the words, "Stop at Railroad Crossings," in red letters. One of these cards, attached to the driver's license, is tacked in the front of the bus, in full view of the driver.

—The board of education of St. Louis, Missouri, has adopted new rules providing for the establishment of a bureau of reference, research, and publicity, whose duty it will be to investigate and report upon all matters relating to public education that may be referred to it by the board of education. The administrative duties of the bureau will be performed under the direction and supervision of the board.

The bureau of reference and research will collect, record, and analyze such information as may be required by the board of education, and for such purpose will prepare and issue such blanks and forms of reports as the board may prescribe and approve.

The bureau may from time to time, as far as feasible, supply educational data and information to the members of the board, to the members of the teaching and supervising staff, and to the general public, subject to the approval of the board.

public, subject to the approval of the board.

In connection with the bureau, there will be created the position of director, who will be nominated and appointed by the board and whose salary and term of appointment will also be fixed by the board. The director may request from time to time from the various executive officers of the board, such information as may be desirable in the conduct of the business of the bureau. There is also created the position of clerk or secretary in the bureau who will be appointed by the director, subject to the approval of the board.

with the bureau who will be appointed by the director, subject to the approval of the board.

—Worcester, Mass. In September a class for deaf children was opened at the Elizabeth Street School. This class is maintained for children who cannot attend the regular schools and is conducted with the cooperation of the state education department.

—The school strike at the Emerson High School, Gary, Indiana, has been adjusted satisfactorily with the return of 1,400 students to classes. Under the agreement, an appropriation of \$15,000 will be made for the erection of a portable school unit for colored students to whom the strikers had objected. The temporary structure will be the nucleus of a \$1,000,000 school plant for negroes in Gary.



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A total of 818 students went out on strike immediately and the rest followed, in an effort to register their disapproval with the enrollment of negro pupils in the Emerson High School. The negro pupils comprised a group of 24 who had been sent to the school through a redistricting of the city.

—The state education department of Georgia has began a survey of the jubils schools of Dada county.

began a survey of the public schools of Dade county, with Mr. J. O. Martin, state supervisor, in charge.

—The schools of Pontiac, Michigan, have reported a substantial increase in enrollment. There are

now more than 9,000 pupils in the schools, as compared with 8,352 in September, 1926. This is an increase of 850 students.

-Pontiac, Mich. By the recent annexation of adjoining property, the school district has nearly doubled its area with the addition of six schools to the system. The addition of new territory means an increase of 500 in the school population, over and above an increase of 850 in school popula-

tion of the original city. The total registration of all the day schools in New York City on September 14 was 1,034,822, an increase of 21,354, or two and one-tenth per cent over that of September, 1926. The Bronx had an increase over last year of 11,413, or seven per cent, the largest gain of any borough. Manhattan Borough showed a decrease of 11,819 in the elementary schools, 739 in the junior high schools, and 920 in the senior high schools.

-Ayer, Mass. The high school in September enrolled every pupil who attended last year, with the exception of those who had been graduated or had removed from the city. One of the graduating class returned for a postgraduate course. elementary schools, every pupil promoted to the high school, with the exception of one, was enrolled in the high school.

-The high school at Rolla, Missouri, was enterchamber of commerce body in honor of its new students. At the meeting "big brothers" and "big sisters" were chosen for the new pupils. At the conclusion of the program, the students, faculty and guests passed to the playgrounds where sliced watermelon and soda pop were served.

—The schools in Owensboro, and in Daviess

county, Kentucky, were temporarily closed September 26, in order to prevent further spread of infantile paralysis. The quarantine was to keep children under 16 years away from schools and other public places of assemblage.

—The deputy state health officer of Maryland,

assisted by the public-school nurses, has undertaken the physical examination of the school children, with the aim of reaching all children in the first three grades. It has been announced, however, that children who were examined last year, those referred to physicians by teachers, and older children in need of medical attention will not be neglected.

The purpose of the inspections is to discover conditions which may be corrected, and to notify parents of conditions which need correction. It is said that as a result of continuous supervision of the health of school children, the number of repeaters has been decreased in ten years from 49 per cent to 23 per cent, while the number of absences on account of illness has been decreased.

-City Health Commissioner Louis I. Harris of New York City, reported on September 29. that the number of cases of infantile paralysis had been slightly larger than for the same period last year. but that the indications were it would decrease with the approach of cold weather. During the week ending October 1st, 42 cases and 4 deaths were reported, while there were 37 cases and 4 deaths the preceding week, and for the week ending September 17th, 53 cases and 8 deaths.

-Mr. Ben H. Barr has been appointed to the position of director of the Division of Housing and Fixed Equipment of the St. Louis board of educa-The position carries a salary of \$4,750.

-Vincent Stupecky is the new member of the

Manitowoc, Wis., board of education.

—John E. Carlson, president of the Kansas City. Kansas, board of education, was recently chosen to give a pep talk to the high-school students of that

-C. F. Van Pelt was appointed a member of the school board of Fond du Lac, Wis., to succeed Mrs. Maude H. Mendenhall, resigned.

-A. Douglas Jamieson is the new member of the Detroit, Mich., board of education.

-McHenry Rhoads, state superintendent of schools for Kentucky recommends that "the next legislature appropriate out of the general fund not less than \$500,000 annually to be placed at the disposal of the state board of education for purposes of assistance and reconstruction, rehabilitation and

elimination of inequalities within limits in various sections of the state unable to give their children proper school advantages even after they have exhausted every means at their command."

Evansville, Ind. The school board has adopted a tax levy of \$1.03 for the present year, which is an increase of three cents over last year. An increase of three cents has been made in the tuition fund, making it 49 cents instead of 46 cents as formerly.

-Mr. J. M. McConnell, Minnesota school commissioner, has announced that the state education department disbursed \$11,246,198 among the public schools of the state during the fiscal year ending June 30, 1927. This is an increase of nearly \$1,-500,000 over the previous year.

-Miss Helen W. Hardy of Newark, New Jersey, has recently completed an investigation into light, eyesight, and safety. As a result of the study, Miss Hardy finds that defective eyesight is due in large measure, to poorly regulated classroom l'ghting, to highly glossed and varnished desks, to small type in textbooks, and to poor lighting facilities for classrooms.

cilities for classrooms.

Miss Hardy points out that the average classroom does not have sufficient light. Windows and artificial light sources are not properly placed, while some schools are not equipped with artificial lighting systems of any kind. There are times when artificial light is needed in every classroom.

In some schools it is found that the children are placed facing the windows, resulting in a continuous glare which is harmful to the eyes. In certain schools, it was noted that the desks are finished with a high-gloss varnish. A dull finish ought

with a high-gloss varnish. A dull finish ought to be used for doors, woodwork, and blackboards. The walls should have a dull mat and not a glossy finish.

Night schools are often conducted in unsuitable Miss Hardy calls attention to the fact that students in these schools have worked all day under various conditions, and that when they come to school they should not be handicapped by insuffi-

Miss Hardy favors the use of large type in schoolbooks. Most publishers of schoolbooks realize the importance of the need, she reports. Proper type for textbooks is a movement in the direction of eyesight conservation.



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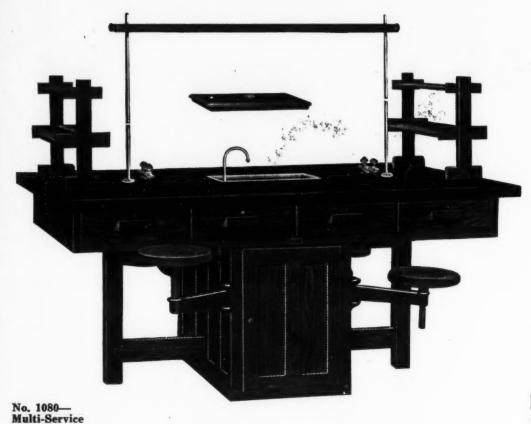
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CHICAGO CORRESPONDENCE

Chemistry and Physics Table

Sixteen additional charges have been filed against Superintendent William McAndrew by the board of education voting 6 to 5. Now it is predicted by many that the trial will drag along until after Mr. McAndrew's term has expired in February, 1928. The sixteen additional charges are briefly as follows:

List of New Charges

1. In disregard of his duties as superintendent of schools he recommended to the board on May 27 the use in the public schools of pro-British textbooks, which did not give a true representation of American history and were introduced for the purpose of furthering propaganda of the English Speaking Union.

and the charge stated the histories in question.

and the charge stated the history had been banned from the schools of New York when Mr. McAndrew was in the school system there. The book teaches, it was charged, that the "continental congress was a collection of pettifogging lawyers and mechanics."

2. That he caused these textbooks to be introduced in the schools to aid the English Speaking Union and to promote anti-American propaganda.

3. For the purpose of perverting the patriotic instincts of the school children he caused the removal from the schools of the picture entitled "The Spirit of '76."

4. He refused to recommend to the school board that the school children be allowed to contribute to the fund for "Old Ironsides."

5. He urged the teachers in the schools to attend a specific course in American history at the University of Chicago, saying that their advancement would be partly based on the taking of this course. One of the textbooks used in this course was known as an un-American work in which George Washington is called a rebel.

The other charges assert that Mr. McAndrew was "insubordinate, insolent and domineering" in his attitude toward the board of education in connection with:

6. The appointment of William H. Campbell, whose term expired Dec. 1, 1925.

7. His refusal to call meetings of the teachers' council as required by the rules of the board of education.

8. His efforts to obstruct withdrawal of textbooks written by Chicago teachers in use in the Chicago schools contrary to board rules.

9. His delay in carrying out orders to transfer Genevieve Cook, a teacher in the juvenile detention home.

10. His absenting himself from duty without cause and without permission of the board.

cause and without permission of the board.

11. His unwarranted absences during school ses-

sions on speaking tours.

12. His editorship of an unprofitable educational periodical, subsidized by schoolbook publishers, which consequently places him under obligation to men whose business it is to sell school supplies.

13. His introduction of a program providing for frequent tests, seriously imperiling the morale of teachers and pupils and bringing complaint from parents.

14. That no ideas or plans advanced or initiated by members of the board of education were received by Mr. McAndrew except with contempt and efforts to block their incorporation in the school program.

ROBINSON CRUSOE AND FRIDAY DISCOVER SOME MORE FOOTPRINTS.—Chicago Tribune.

15. His recommendation for employment of persons in the guise of teachers for places which should be properly filled under civil service and his issuance to teachers of certificates without proper examination in disregard of the Illinois statutes and board rules.

16. That throughout his entire term Mr. Mc-Andrew frequently refused to comply with orders of the board of education although these orders were explicit and exact.

Other items of interest in connection with the trial are: One of the school trustees intimated that Mr. McAndrew is not being given a "fair-and square" trial. Dr. Charles H. Judd, of the University of Chicago, has been brought formally into the case as a backer of the suspended superintendent. He was named in the new charges. On advice of his attorneys, Mr. McAndrew refuses to answer any questions regarding the new charges; his attorneys are reputed to have advised him that they are improper before the school board in its capacity as trial body. His stenographers have testified against him. His executive assistant, formerly a principal, admitted giving Mr. McAndrew several papers bearing on the case since his suspension. He was criticized at the trial by the board president for having done so, and one newspaper hinted that charges would be filed against him also. Under the tenure law, his executive assistant must be returned to a principalship if ousted from his position downtown. He was remote school in the city—sent "into the sticks" one of the newspapers called it.

Former Congressman John J. Gorman has testified at the trial to the effect that Supt. McAndrew has been the direct agent for pro-British propaganda.

Some of the newspapers and civic organizations have issued "red hot" editorials and "ringing" resolutions in support of the deposed superintendent. For example, excerpts from an editorial in the Chicago *Tribune* and in the Chicago *Daily News* follow:

Tribune—"It is a trial in the judicial sense of the term, only by courtesy. . . . The jury has already been tampered with. . . . No one but a fool or a faker believes Mr. McAndrew guilty. It is a decision between probity and dirty politics

(Concluded on Page 130)

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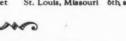
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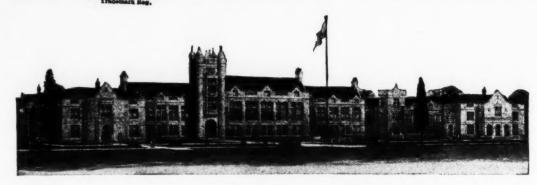
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(Concluded from Page 128)

with the odds on dirty politics to win. . . . . The position of superintendent of schools in Chicago is in danger of being made untenable for any one with self-respect or a desire to stand well in his profes-

News-"It is notorious that the plan to oust Mr. McAndrew is an essential part of the larger plan to open up the Chicago public-school system to political exploitation. Indeed, the political maneuvering has already begun. Teacher-clerks recently appointed to take the places of those removed on the board's orders-over the vigorous protests of Mr. McAndrew-clearly because they were true merit appointees, were obliged first to get their applications approved by the ward committeemen of the dominant political organization and then to agree to join a union which is an effective part of the organization. .

"If, therefore, the proceedings at the trial should disclose that the charges against William Mc-Andrew were trumped up charges contrived for the special purpose of throwing him out of the public-school system because he bars the way to those four horsemen of educational chaos, politics, graft, ignorance and bunk, what will the people of Chicago do

Several civic and religious organizations have resolved to "investigate" the present management of the schools and have passed resolutions. Following is a portion of a resolution passed by the City Club of Chicago, a leading club of its kind.

"In the evident passing of the actual control of our school system from primarily educational to primarily political agencies, Chicago now faces a situation which is of great concern to its welfare and of great danger to the best interests of its boys and girls. This is because the fundamental principles of good school management are slowly but surely being undermined and circumvented by per-sistent actions animated by obvious political motives and carried out in open defiance of modern educational standards and objectives. . . . .

'It is obvious, however, that the safeguards of the law for the protection of our children will be largely nullified if the superintendent can be controlled or intimidated by the board of education, the majority of which is dominated by a politically minded president. This seems to be the situation

facing Chicago unless public opinion speaks loudly against it.

"Machine politicians chiefly seek, so far as our schools are concerned, to control, first, the spending of all the money contained in the budget (some 75 million dollars per year in Chicago) and, second, the maximum possible percentage of all jobs and all employees in the school system.

To accomplish such purposes, they know very well that they must control the superintendent. It is clear that in their anxiety to do this they planned the dismissal of the present superintendent even before they got control of the board of education.

"The education committee of the City Club of Chicago firmly believes that Mr. McAndrew should be reinstated as superintendent of schools because suspension has been inspired by political motives.

"The committee further believes that the board of education should feel the pressure of public opinion that it consistently adhere to the principles underlying the laws of our state, protecting the schools

political maladministration." Fifty thousand children and their parents crowded into the Memorial Stadium at Soldiers' Field, Grant Park, to attend a Safety Pageant. Every public and parochial school in the city sent representatives. A huge parade included the patrol squad of every school, besides many floats, bands, and dignitaries. An impressive feature of the pageant was the silent cortege of 389 children who filed by the reviewing stand, representing their playmates killed in Chicago during the past year. The children taking part were of the same age and say as the children who most their death. The new sex as the children who met their death. The new school board has started a drive with splendid impetus in an attempt to make Chicago a safer place for children.

An article of interest to educators appeared recently in the finance section of the Chicago Sunday Tribune. After stating that America spends about \$11,000,000,000 annually on her schools, the editorial writer, Harper Leech, writing in the section for Big Business Men, stated:

Probably we shall never get the maximum social dividend from our school investments until we have plowed much more money into the system-more money for personnel rather than plant. .

"It is not at all unlikely that the best means for making the schools more immediately productive

of more available personnel for trade and industry, would be the general raising of teaching salaries to the point where an increasing proportion of men would become teachers. Higher salaries will at-

figure in the community. He was once so universally and plenty of modern educators carry on the tradition, but the rewards are hardly such as to give school teaching an even break in the bid for ability against other lines. The best men in it are underpaid—that's certain."

The principals of Chicago have a strong organization called the Chicago Principals' Club to which elementary, junior-high and senior-high-school principals belong. Dues are \$40 per year. Last year this organization spent \$11,235 in its various activities. It hires a full-time executive secretary and pays him \$4,000 per year. It publishes a monthly magazine called the *Principals' Club Re*porter on which it expended \$652 last year. A Yearbook is also printed requiring an expenditure of \$872. Rent, clerical help, and other printing cost the principals \$3,700. The organization maintains a suite of rooms in the building of the City Club of Chicago.

Teachers' Visiting Days
-The board of education of West Allis, Wisconsin, has granted one visiting day each year to all teachers and principals, beginning with the school year 1927-28. The rules governing visiting days

are as follows:

1. All visiting days must be arranged as early in the school year as possible and not later than the end of the first semester.

Visiting days must be arranged by buildings. That is, an entire building will be dismissed for a day so that all the teachers in one building may have the same day. The day is to be decided upon by the principal and the teachers.

The visiting day may not be set for Monday or Friday, or on a day preceding or succeeding a legal holiday or holiday recess.

4. Each teacher taking advantage of a visiting day must fill out a report in duplicate, one to the principal of the school and one to the superintendent. These reports should give a concise statement of commendable features observed which may be profitable for the improvement of the local school system.

X

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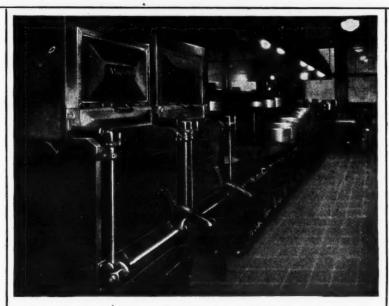
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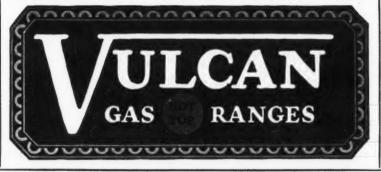
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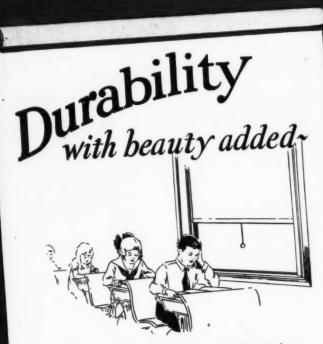


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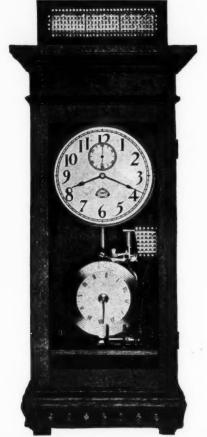


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—Dr. Sven Lokrantz, medical director of the public schools of Los Angeles, has worked out some special rules for the handling of the 11,000 children in the schools who have heart defects. A special heart committee examines the children with more severe heart conditions as often as seems advisable in addition to yearly examinations made by the school physicians.

by the school physicians.

Such children are not asked to perform or recite before the assembled school. Their recitations are made as free from strain as possible, that is, they are called upon very early in class recitations in case anxiety might lead to mental strain. They are permitted to enter the classroom late so that they will not have to hurry to school or rush between classes. Even the apportioning of homework is adjusted to their condition. Special corrective exercises are recommended and these are supervised in the eighty classrooms which the schools afford.

The school health department has installed an electrocardiograph which aids in diagnosis and the observation of the progress achieved in increasing the heart capacity after compensation has been established. Laboratory tests, and the X-ray are also used in the work.

—School officials and teachers of Morrow county,

—School officials and teachers of Morrow county, Ohio, some 200 in number, recently met to discuss the subject of infantile paralysis which had made its appearance in that region. The teachers were instructed to keep a daily vigilance regarding the health of children under their supervision, and whenever a child is discovered, who does not appear to be feeling well, immediately to report the same to the superintendent, or in case of one-room schools, the head of the school, to have the child immediately taken home to be cared for and watched by the parents; as no child in such a condition, regardless of the cause, should be kept in school and returned home in the school truck.

-Reports from 42 states to the United States Public Health Service for the week ending August 20, indicated the presence of 317 cases of infantile paralysis, whereas in the same states last year at that time, there were only 109 cases reported.

—Dubuque, Iowa. The opening of the elementary schools was delayed due to precautionary measures against the spread of infantile paralysis. During the time that the schools were closed, there were meetings held with the members of the elementary department which were addressed by the city physician, the county superintendent, and the superintendent. The meetings were followed by special grade meetings in charge of the supervisor. The purpose of the meetings was to give out information and instruction so that the schoolwork would proceed rapidly and effectively when the schools were finally opened. The quarantine was raised and the schools opened on September 19.

—A petition signed by 5,000 names has been presented to the board of education of St. Louis, Mo., in opposition to vaccination. The present rule makes vaccination compulsory. The petitioners seek to make it optional. B. J. Shackleford, assistant superintendent, said: "The vaccination policy has been accepted generally as a measure designed to protect the children of St. Louis, and as such has been accepted by the large majority of parents. Because of this provision, St. Louis has been spared an epidemic of smallpox."

—Forty-three state high-school athletic associations do not allow state basketball tournaments for girls, according to information just received by the United States Bureau of Education.

It is shown that district or divisional tournaments for girls are not allowed by 36 associations, and only fourteen associations, including three that conduct state tournaments, allow county or smaller tournaments.

—The open-air school conducted for several years by the school authorities at Charlotte, N. C., has been closed. The maintaining of eleven students in the school last year is said to have cost the city \$260 per pupil, and it was taken that this work is not the work of the public school.

—Health Commissioner Louis I. Harris of New York City, in a recent statement, declared that there was no danger of infantile paralysis to the children in the school system. Although there are a few cases on record, a careful study of the situation showed that the disease had not assumed serious proportions in the city. To that date, 42 cases of the disease had been reported, which was 24 fewer than the previous week, and six fewer than the week before that.

As a preventative measure, school physicians and nurses were asked to cooperate with the school authorities in examining and excluding children who present even slight symptoms of a communicable disease.

—That 95 per cent of kindergarten and firstgrade children in the public schools of the District of Columbia have physical defects is shown by a recent report of the health officer. Many of the defects noted were minor in character but all needed correction.

A total of 41,776 physical examinations were made by medical inspectors during the year 1926-27. Of these, 67.8 per cent had defective teeth; 46.7 per cent had diseased tonsils; and 33.2 per cent had enlarged cervical glands. Other defects noted were poor nutrition, defective nasal breathing, defective vision, orthopedic defects, anemia, and cardiac disease. Of 124 children reported as retarded, 120 were found to have some physical defect.

An examination of 1,095 applicants for teaching positions, revealed that 366, or 33.4 per cent, were passed unconditionally.

—Baltimore, Md. During the past summer the playground athletic league operated 134 playgrounds and six swimming pools under trained leadership and supervision. The regular daily schedule of each playground varies, and once during the summer all the children take part in a united play festival held at the stadium. About 3,000 children took part in the festival held this year in August. During the summer twenty of the playgrounds conducted baby days, when children under 3 years of age were examined by doctors and nurses.

—The American Association for Medical Progress, 370 Seventh Ave., New York City, has reissued a pamphlet on the subject of diphtheria, reporting the striking progress made in the control of the disease in cities where toxin-antitoxin campaigns have been carried out.

In the five years' campaign in New York City, for example, the number of cases dropped 34 per cent, and the number of deaths 41 per cent. New Haven, Conn., and Youngstown, Ohio, have the lowest mortality rate in the country, 0.6 per 100,000, a drop from 7.1, and 18.5 respectively.

## Some Queer Misconceptions of Intelligence Tests

(Concluded from Page 42)

three groups. The following table shows the questions asked and the favorable and unfavorable replies.

These results may now be duplicated in many cities. Is not the question, then, as to whether we can or cannot measure intelligence rather academic?

## Some Theoretical Considerations 1. Definition of Intelligence

One of the first points made by the superintendent in the November article is that "intelligence has never been defined and therefore can-

question. The professor, however, was known by his writings to be of superior ability.

The writer gave him an intelligence test, thinking that surely, if there were anything in this "slow-but-sure" theory, the professor would get around to answer but a few questions. To the writer's great surprise, however, this professor of extremely slow and deliberate habits of speech, when confronted with a task calling for quick thought, answered many more of the questions than the normal adult and got a very high score.

		After One	Semester	After Tv	vo Semesters
	Question		Unfavorable	Favorable	Unfavorable
1.	Is it more or less tiresome to instruct when the pupils are				
	arranged in three groups than it was when all were to-	52	9	61	0
2.	Would you wish to return to the plan of giving all pupils the same work to do?	60	1	61	0
3.	Would you use the mental tests for classifying grade children, if permitted to do so, if you were teaching elsewhere?	61	0	61	0
4.	How have the pupils of group one (dull) been affected in		· ·	0.1	
	feelings, industry, or in any other way by the three-group arrangement?	98	3	61	0
5.	How has group two (bright) been affected by the three- way grouping?		0	61	0
6.	How has group three (normal) been affected by the three-		-	61	0
	way grouping?		•		
***	t be measured" We may overlook the fact It	is, of con	urse, possib	e that a	person un-

not be measured." We may overlook the fact that on the same page two definitions of intelligence that have been given were mentioned, one even in quotation marks. If the superintendent will but turn to any recent book on intelligence testing or psychology he will find numerous definitions of intelligence, so we really do not know what the superintendent means by saying that "intelligence has never been defined and therefore cannot be measured."

But let us suppose it has never been defined. Perhaps it is not too late yet to give it a definition. Let us define intelligence as that ability which is measured in common by the various so-called "intelligence tests." Presto! Intelligence has now been defined and therefore can be measured!

Note that we were a bit discreet in giving intelligence a definition. The superintendent grants that so-called intelligence tests measure something in common. This something, by our present definition, is intelligence. Who will deny, then, that intelligence can be measured? Is it not being measured every day?

#### 2. Fallibility of a Single Test

The measure of intelligence (as above defined) that is obtained from any individual test is, of course, only approximate. The degree of approximation can be stated quite accurately by a coefficient of correlation. No well-informed researcher assumes for a moment that an intelligence test is even entirely consistent with itself—it has a certain unreliability which also may be expressed by a reliability coefficient. All of which means that no single measure of intelligence is to be considered as final or absolute. All this is, of course, platitudinous to the enlightened researcher.

#### 3. "Slow-but-Sure" Individuals

The article mentioned made quite a point of the more or less fanciful individual who has "that slow and cautious habit of thinking and revising conclusions which is characteristic of men and women of superiority," but says that "the person who possesses this superior ability is actually handicapped by it when subjected to an intelligence test."

This can hardly be interpreted in any other way than as a statement that persons of superior ability make low scores on an intelligence test. But do they? Most decidedly not. One has only to get at it and test a few persons of superior ability to discover that this is only a myth.

The writer once knew a college professor who was so deliberate in his speech that he often took as much as a minute to answer an ordinary

It is, of course, possible that a person unaccustomed to quick thinking and reacting may be a bit slow in getting started on a timed intelligence test the first time he tries one. Indeed, as all researchers know, first scores are the least reliable, other things being equal; hence the common custom of retesting for greater accuracy. But on a second or third trial, the apparently slow and careful person of superior ability can speed up and make a high score with little difficulty.

Careful researchers have shown repeatedly that the pupils who work most rapidly tend to be the ones who get the highest per cent right of what they attempt. Therefore, in the interest of "a plea for a science of education" let us not put forth conjectures and opinions about slow and cautious persons as scientific facts.

#### 4. Variation in Scores

The superintendent sweepingly condemns tests because in certain cases the scores of a pupil in two tests differ appreciably. Incidentally, it should be remembered that, while it is quite possible for a bright pupil to fail to do himself justice on any given test, it is quite impossible for a dull pupil to do more than his best. Therefore, if a pupil has made a low score on one test and a high score on another, there is nothing to worry about. It is obvious that the first score was not a fair measure of his ability and that, consequently, the second score should be the one to go by. To be safe, of course, it would be well to give the pupil a third test as a check on the second. It is better to give three tests to get a reliable measure than to give none at all or condemn the test on the failure of the first test adequately to measure the pupil.

5. Teacher Judgment The superintendent feels that "teachers' judgments . . . . give us as fair an index to a pupil's intelligence . . . as the intelligence tests will give." Undoubtedly this will be true, when the teachers have come, through the use of tests, to appreciate the great range of individual differences, and when they have had time to become acquainted with the pupil. But the intelligence test will find out in 30 minutes of the pupils' time and 5 minutes of the teacher's time per pupil what she would take a month to learn, perhaps, from casual observation. And teachers have been known to change their minds about pupils, after knowing them a year, when they saw the scores on an intelligence test the children had made.

The principal cannot wait till a month of the school year has gone by before classifying his

pupils. Hence, valuable as teachers' judgments are (and by all means let them supplement the test scores), they cannot take the place of the test score in classifying new pupils at the opening of school.

#### 6. The Criterion of Intelligence

At the beginning of the December article, the author says that "The validity and reliability of an intelligence test at present is established by showing that it has a high correlation with another test," and considers that this procedure rests on a false assumption.

Let us be more precise. First of all, validity and reliability are not established by the same means. Reliability is the degree to which a test is consistent in measuring whatever it does measure. And validity is the degree to which it measures that which it purports to measure.

Reliability is obviously measured by the correlation between two forms of the same test. Validity is determined with reference to the purpose of the test.

Now, as has been shown, what school administrators and teachers want is a test that will help to segregate the bright, normal, and dull, that is, those who can go through school rapidly or do more than normal work, those who can go through school only at the normal rate and do normal work, and those who must go more slowly or do less work. Therefore, if we can make a test that will segregate these pupils, it is a valid test for its purpose. And if this is our purpose, the criterion of our success in making the test is the degree to which those pupils that the test designates as bright, do succeed in making more rapid progress than normal, and the degree to which those that the test designates as dull, do fail to make normal progress.

If the reader will examine carefully the manual of directions for the Otis Self-Administering Tests of Mental Ability,<sup>2</sup> for example, he will see that the test has been validated by exactly that criterion. Indeed each item has been subjected to the acid test. If it did not itself distinguish between bright and dull pupils as defined above, it was discarded.

The point is that if prognosis of progress through school is the aim of the test, then ultimate progress through school of those tested must be the criterion of validity. And that is the criterion used by competent test makers.

If for convenience we choose to call this quality which differentiates bright and dull pupils, "intelligence," then for practical purposes that is what intelligence is. It is defined and measured, and the measures are used, and used in thousands of cities, and used successfully.

Why then shall we waste time over the definition of intelligence and whether it can be measured?

<sup>&</sup>lt;sup>2</sup>World Book Company, Yonkers, New York.

<sup>—</sup>Dr. Rufus Cole, director of the Hospital of the Rockefeller Institute for Medical Research, has recently been appointed a member of the New York State Commission on Ventilation. Dr. Cole is considered an expert in the diagnosis of respiratory illnesses and it is expected that his advice will be very helpful in research projects in ventilation which the commission is conducting.

The commission was reorganized a year ago with the appointment of a disinterested group of well-known scientific men, who will maintain a bureau of information and carry out further investigations on the technical, legal, and economic aspects of the problem of school ventilation. The Milbank Memorial Fund, which provided the money for the initial work, is also financing the present program.

The other members of the commission are: Dr. Frederic S. Lee, of the College of Physicians and Surgeons, New York City; Dr. George T. Palmer, of the American Child Health Association, New York City; Dr. Earl B. Phelps, College of Physicians and Surgeons; Dr. Edward L. Thorndike, Teachers' College, Columbia University; and Mr. Dwight D. Kimball, consulting engineer, New York City.



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(Concluded from Page 36)

will be. Those schools must be designed not

will be. Those schools must be designed not merely by an architect, but by a competent school architect. The man whose brain conceived the most beautiful church edifice in our town planned a school building for us that was a terrible fizzle.

THE FUNCTION AND ORGANIZATION OF EDUCATIONAL-RESEARCH BUREAUS (Continued from Page 40)

obvious that accomplishment falls far short of anticipation, due largely to inadequate personnel. Most of our bureaus are confronted with the task of doing a highly technical piece of work, with a skeleton organization. This is not only poor economy. It actually tends to discountenance the whole research movement in the eyes of boards of education and of critical professional workers in the general field. A number of cities during the past three years have either discontinued their research bureaus, or have transferred part of their activities to other bureaus, largely because of the confusion of function between research and service, and because of understaffing. This statement is based on correspondence in possession of the writer. In reporting on the New York City bureau of reference, research, and statistics, 1924, the inadequacy of the staff in each division is stressed as one element limiting the full usefulness of the bureau.

Some Encouraging Trends

Some of the encouraging trends should now occupy our attention. It is significant of the increased confidence being placed on the contribution of research, that the director is in nearly a third of the cities, given the status of an assistant superintendent. This is far from being a minor condition. Deriving much of its value through the coordinating and integrating nature of its work, the bureau needs recogni-

tion as a major staff activity in order that its findings may receive proper consideration by other staff and line elements of the administration. As bureau directors become better qualified in their field, this tendency should increase.

New York City, Rochester, Detroit, and other cities recognize the need for a proper division of labor within the research bureau itself. While in smaller cities the organization need be less complex, provision of further classification of service under the various heads mentioned in our activity analysis will be necessary to insure a proper specialization of research.

While the tendency is seen to be well distributed throughout our report, certain cities are particularly emphasizing the advisory and coordinating function of the bureau of research. No other single department in any city can have the opportunity that comes to a staff department, such as the research bureau, to integrate and coordinate, through advice, through conferences, bulletins, printed reports, and through the very nature of research itself, the elementary, junior, senior, and other sections of the school system. While the superintendent always has this as his responsibility he has here, a proper and reliable instrument at his hand for this important phase of work.

A Proposed Organization

What organization of the bureau of educational research will most probably guarantee a further wholesome development of the research function?

In the recommendation as to proposed organization of such a bureau, we have had in mind three prestions, to orientate the student in the critical study thereof:

1. Does the inclusion of this department or worker conform to our definition of the research function?

2. Will the placement of such an activity tend to embarrass the legitimate work of any

other department or lead to confusion of the line of proper authority within the system as a whole?

3. Can the bureau work efficiently if we omit this person or activity from the scheme?

In the endeavor to explain the relationship of the various research activities to those of the whole system, a graphic representation or organization chart is given below, which we have endeavored to make as simple, and yet as typical as possible. We have followed a generally accepted scheme of organization, so far as concerns those portions of the system outside of the research bureau, and have merely blocked in the other departments, in order to have the research bureau stand out in relief. This is found in Chart I.

In reading this chart, it is necessary for one to keep in mind that we do not advocate that the research bureau shall supervise or dominate the carrying out of the activities for which it is asked to conduct inquiries. It is our contention, for instance, that under the division of child accounting, aside from the general survey function, which is organized and approved by the director, the initiative shall reside in the department or bureau of instruction itself. In the statistical division, the initiative in discovering a need for research should remain with that part of the system needing the information. The curriculum research staff, again, should be at the command of those committees of the supervisory and instructional staff whose particular field is being studied, and only after the director shall have been consulted shall this division function, and this only as a research division.

#### The Director

The research director will have the general responsibility for the functioning of the whole bureau and all projects undertaken should be (Concluded on Page 139)



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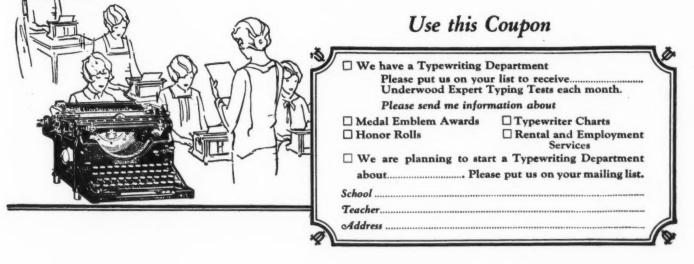
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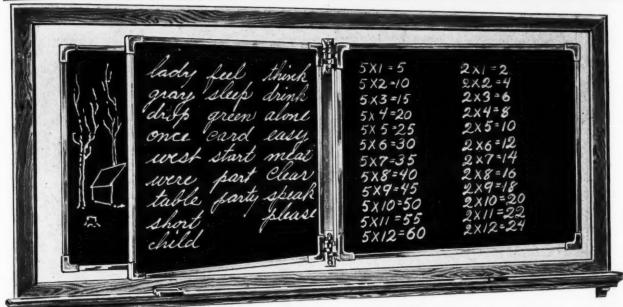








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(Concluded from Page 136)

subject to his advice and approval, before they are launched. He needs to be a man of high administrative ability, familiar with the theory and practice in every field of school organization. He should have special training in psychology, testing, statistics; be a thorough student of curriculum and the philosophy of education. His experience in the field should be for cities of this size, such that he will be sympathetically intelligent as to the proper relation of the school system to other social agencies. A valuable part of his apprenticeship would probably be the superintendency of a smaller system of schools. His professional training should have been at least that of a master's degree in education, with an emphasis in statistical and bibliographical research. In fact, his training should qualify him as a superintendent of schools, on the one hand, and as a scientist in education on the other. He must be possessed of a personality which can be tactful in dealing with other professional and nonprofessional people; he must have an open-minded regard for truth; he must exemplify to his staff and his confreres, the best type of American schoolman. These men are undoubtedly hard to find. But only when we have educational research in these important cities headed by men whose standing is unquestioned can we claim to be more than dabblers in research.

The Staff

A study of our chart of organization will disclose the fact that according to the size of the city, the available budget for research, and the completeness of organization desired, the bureau personnel is capable of contraction to the director, three division heads, and a general clerical force, of two; or it may be expanded to meet the requirements of a city such as Chicago, New York, or St. Louis, without the addi-

tion of other divisions, or the inclusion of a topheavy and expensive staff.

The Activity Program and Procedure

Surprise may be occasioned by the fact that we have not included as proper research functions, many activities which our questionary disclosed as characteristic of certain bureaus. Our defense for this already has been indicated. We maintain that if a research bureau is to have all of the functions of vocational guidance, attendance supervision, textbook selection, personnel management, and the like, its essentially research nature will be lost sight of and this tendency toward confusion of jurisdiction will be greatly increased. We have in our proposed bureau given due consideration to the research aspects of these problems and have staffed accordingly.

Another whole paper could be written profitably on the subject of the actual procedures to be expected of a research bureau such as we contemplate. It would be out of place here, to enter into such detail. We may, however. sketch very briefly the presumptive main actuating principles:

1. The superintendent of schools is seen as the directing and correlating agent. In his cabinet of assistants, the director of research becomes acquainted with the policies outlined for the year or for longer periods.

2. The other assistants present their programs and problems, and it becomes evident that certain facts must be established, upon which to ground their procedure.

3. The director of research functions in the outlining of the necessary studies, for the carrying out of such research, and assists the other department in details of method and attack.

4. Individual officers, whether of instruction, accounting, buildings, budgets, or whatever the field, turn over to the director, or his designated assistants, the problem to be solved.

5. Finally, we see the bureau of educational research in cities of 100,000 population and over. as a fact-finding, consulting, integrating agency, which in its action would no more dominate the whole field than would be the case of any other branch of service. Its field is that of establishing objective evidence upon which the active work of administration, supervision and instruction should depend. In the opinion of the writer, economy of time, effort, money, and social effectiveness in dealing with the education of youth warrants such an organization.

When such an organization as we propose becomes actual in the field of larger cities in the United States, the value of such a collecting and distributing agency for research as the bureau of educational research of the National Education Association will be vastly increased. It then will be possible for such a clearing house to have reasonable assurance of the thoroughness and reliability of technic employed in such large research projects as may then engage our serious efforts. Such a possible widening of the research field is clearly contingent at present upon the organization of a sound research procedure by these dominating centers represented by the cities of the United States with populations in excess of 100,000.

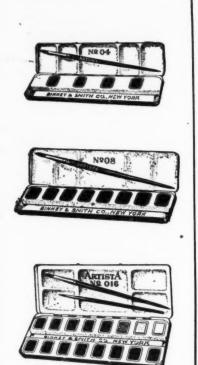
THE PROBLEM OF THE SELECTION OF **TEXTBOOKS** (Continued from Page 44)

The Use of the Score Card in Textbook Selection

As an instrument to help the selecting committees do their work in a more tangible form the score card for textbooks has come into being. A collection of these score cards show a wide variation; and the variation is equally evident among score cards in the same subject from various cities. They range from complicated score pamphlets with fifty or more items for consideration with a numerical value assigned to each item, to a single statement of objectives BUBBLOON OF BURN BUBBLOON BUBBLOON BUBBLOON BUBBLOON

Manufactured by the Makers of CRAYOLA Crayons

## "ARTISTA" WATER COLORS



## WATER COLOR REQUISITES

The application should be smooth with free flowing quality.

The color mixes should be clean with the absence of sedimentation.

The color must not penetrate the paper; should be permanent in sunlight.

The primary colors should be of such a nature that clean secondary colors can be mixed from them.

Physically, they should have clean lifting qualities and no tendency to become soft and sticky in damp weather.

Repeated experiment has proven that ARTISTA Water Colors will stand the test on all the above points. Furthermore, they have behind them the reputation of the makers of CRAYOLA and other Gold Medal crayons and chalks.

## BINNEY & SMITH CO. 41 East 42<sup>nd</sup> Street New York, N.Y.

<u>のこれがあることのできないものとものとものともなられることがられたものともなられてき</u>

of the curriculum for which the textbook is selected.

Score cards can easily become as undesirable as the secret committees in the eyes of both the seller and the selecter. Ordinarily, the score card is built by the textbook committee, and has the objectives of the curriculum incorporated within it. About 45 per cent of the cities reported the use of a score sheet of some sort. Probably the most objectional feature is the assigning of numerical values to the different items on the score card. One superintendent of schools reported: "That a textbook might score highest on the score card, and yet not be the most practical for classroom use." The tendency seems to be toward the setting up of objectives of the curriculum and then the selection of the textbooks that fit these objectives.

Such are some of the current tendencies in the selection of textbooks, which is an administrative function of school system placed in the control of the superintendent of schools, who is responsible for the same as he is also responsible for recommending teachers. As the selection of teachers has changed from layman selection to selection by experts, so the selection of textbooks has changed from layman selection to selection by those most competent to judge. Let us set up curriculum objectives as the standards for selecting these tools, as we have set up minimum standards for the selection of teachers. Keep in mind that the exchange price of new for old books, number of sample copies distributed, or desk copies promised, should not be considered in the selection of tools with which to accomplish the objectives of the curriculum.

FACTORS IN FIXING MAXIMUM TEACHERS' SALARIES

b) Junior-high-school grades . . . . 2,000
c) Senior-high-school grades . . . . 2,200

(3) That first maximums, being the same as the present maximums, be attained under the rules now in force, i. e., by automatic annual increases of \$100 to the entering salaries and to each succeeding year's salaries until the first maximums are reached, except when in the case of individual teachers the annual increase is withheld by vote of the school committee on the recommendation of the superintendent and supervising principal.

(4) That the second maximums be attained by

(4) That the second maximums be attained by automatic annual increases, but that only those teachers shall be eligible for second maximum increases who meet the requirements stated in recommendation 5, and who in addition have successfully taken at least four professional-improvement courses approved by the superintendent of schools.

(5) Eligibility requirements for receiving automatical seconds.

matic annual increases of the second maximums:

I Elementary schools. (a) Four-year-course graduates of colleges of recognized standing;
(b) graduates of state, city or county teacher-training schools, providing a minimum of two years of training beyond the high school; (c) teachers of at least ten years'

teaching experience.

II Junior high school. (a) Graduates of four-year courses of colleges of recognized standing; (b) teachers having three years of training beyond the high school; (c) teachers of at least ten years' teaching experience.

at least ten years' teaching experience.

III Senior-high school. (a) Teachers having a minimum of four years of training beyond the high school; (b) teachers of ten years' teaching experience.

The statement has been made repeatedly in discussions of the salary question in Revere that, to retain its men teachers, the city must pay higher maximum salaries to the men than to the women. During the period from 1920 to June, 30, 1927, both a larger number of women teachers and a larger per cent left Revere to accept better-paying positions elsewhere than was the case with the men.

The Ability of the City to Pay

The administrators of school systems are prone to justify the increasing total cost of the schools in terms of the better educational results which are achieved as a result of increased expenditures. Increased expenditures cannot be justified unless they do result in better educational achievements, but the amount of the in-

creases must be conditioned somewhat by the ability of the city to pay. Equality of educational opportunity in America and in Massachusetts is still a theory, not a fact. Just as the lack of family wealth is a limiting factor in determining the amount of education the children of a poor family shall receive, so the taxable wealth or lack of wealth of a city determines to some extent the educational activities of a city. In the case of the family this condition is sometimes overcome by the willingness of the family to make a sacrifice for education, and it is no less true in the case of the city.

The relative ability of a city to pay is measured by: (1) the amount of taxable wealth; (2) the size of the school population; (3) the total tax rate necessary to provide funds for all municipal departments.

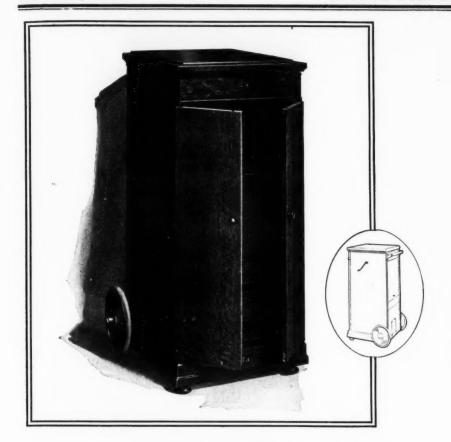
The following data are taken from the latest annual report of the Massachusetts department of education. The figures for 1927 are not available.

(1) The average amount of taxable wealth per pupil in average membership in the 39 cities is \$10,874. The amount for Revere is \$4,970.

(2) The number of pupils actually in the membership of the public schools per hundred of population is as follows: Average in 39 cities, 16; in Revere, 26.

(3) Revere's tax rate is one of the highest among the 39 cities. For each of the last three years it has ranked as one of the nighest three.

The result of certain individual items of expenditure justify themselves wholly from a financial point of view because they result in a saving of more money than is represented in those particular items of expenditure. Among these are, for example, additional or increased expenditures for the services of a competent purchasing agent, a general repair man, a central supply system clerk, or a superintendent of (Concluded on Page 142)



Mother Goose songs, songs of far-off lands, lullabies, spirituals, poem-stories, accompaniments, rythms, folk dances, musical selections, music of instruments of the orchestra

## ... teachers should have these and the New

## SCHOOL ORTHOPHONIC VICTROLA

Every variety of beautiful song and music needed for the children is now inimitably Orthophonic, and it can come forth like the actual living music instead of a shadow of this music—on the New School Orthophonic Victrola.

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#### Songs for Children

Sing a Song of Sixpence; 2. I Love Little Pussy; 3. Pussy Cat; 4. Dickory, Dickory Dock; 5. Over the Hills and Far Away; 6. By Lo; 1. Diddle Diddle Dumpling; 2. Wee Willie Winkie; 3. Bean Porridge Hot; 4. Three Little Mice; 5. Jack and Jill; 6. The Feast of Lanterns.

#### Rhythms

#### Instrumental Music

The School Orthophonic has every proved necessity for school use. Lustrous oak cabinet in early Italian style; wheels for easy moving from room to room and up and down the stairs; a portion of the back that lifts into a shelf to make a desk for you; automatic stop when record is played; locks for both doors, and for the cover, to prevent tampering. . . . A payment plan can be arranged with your Victor dealer. Or write us. Let us send you complete list, to date, of Orthophonic Records for every class in every grade in school. Some are many records in one. Hear these:

#### Accompaniment for Group Singing

America the Beautiful (Bates-Ward); Battle Hymn of the Republic (Howe-Steffe); Columbia, the Gem of the Ocean (Thomas à Becket) (pipe organ by Mark Andrews . . . an accompaniment really inspiring!).......................20745 75c

#### Songs for Junior High School

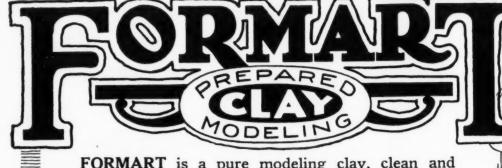
#### Negro Spirituals

The Educational Department

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Colorado

NEW YORK CITY

The adviced had CLAY CO.

KERAMIC KILNS
also a DFC product, are

recommended to preserve the work of the student. Write for Bulletin No. 360.

(Concluded from Page 140) schools who is more efficient in the matter of obtaining good educational results and at the same time keep the per pupil cost of the schools below the average.

SALT LAKE CITY

#### CONTROL OF SCHOOL ENTERTAINMENTS IN SIOUX CITY (Concluded from Page 60)

ings during the first semester, keeping in mind those that should be relegated to the second semester in order that the year may be balanced. Information pertaining to entertainments and the dates on which they will be held, must be in the superintendent's office each school year not later than September 30.

## MAKING A HIGH-SCHOOL SCHEDULE (Concluded from Page 61)

pupils will make requests for changes at the opening of the semester, if the courses have been properly and carefully explained at the time of registration, and examined by the section-room teachers with great care before their approval is given. Of course, care must be taken of all changes on account of subject failures. Many of these can be avoided if the section-room teacher carefully follows the classwork of her pupils and advises with care when the pupil selects the subjects at registration time. They cannot, of course, all be taken care of in this way, and the remainder must be changed as soon as the student receives notice of failure.

The use of numbers on the schedule of recitations has many advantages over methods which do not include numbers. When a pupil informs the principal that he is having trouble in class 517, it will be immediately apparent that this is a class in social science, reciting the seventh period with teacher 51. Thus he immediately tells the principal the subject, the period of the recitation, and the teacher. Class assignments are easily and readily made on the pupil's reg-

istration sheets. In all cases where the subject does not recite daily, the class number appears, and following it the study-hall-number assignment is made for the days of the week in which the class does not recite. Another advantage is that the principal can give to each pupil on the opening day of school a complete schedule of recitations and study halls, which can be interpreted to a group of 40 pupils in about 30 minutes by the section-room teacher. During the remainder of the first day the regular class schedule can be operated, and each teacher will have a complete roster of pupils for all the classes and study halls assigned.

All pupils should be scheduled by the principal with the help of two or three teachers. This work in a school of 1,000 pupils will not require more than ten hours of work on the part of two teachers, and in a larger school the work can be completed more rapidly on account of the greater number of subject combinations.

### SCHOOL FINANCES IN A SMALL OHIO

CITY

(Continued from Page 62)

In the local situation in Kent, the superintendent has been elected purchasing agent, and the appropriation ledger is kept in his office. Purchase orders in triplicate (for vendor, purchasing agent, and clerk) are issued in the exact amount for all purchases.

The clerk has charge of the payment of all bills and the cash records. When a bill is received in the office of the purchasing agent, the clerk's copy of order is attached to bill. These bills are prepared and presented to clerk for passage by the board at each monthly meeting.

Carrying the requirements a step farther than demanded by the law, the following report is made to the board at each monthly meeting, showing balances in every fund for which money has been appropriated. Large cities have more subdivisions in the plan set up by the state auditor's office.

The report printed here is one actually submitted to the board at a special meeting in September, 1927, when the final appropriation resolution was adopted in accordance with actual receipts from the county treasurer. The report is made out in mimeographed form, and each month the total appropriations to date and balances are computed from the appropriation ledger. A copy of this report is prepared for each member of the board of education.

Some smaller cities are objecting to this plan, but it meets with the writer's hearty approval for the following reasons:

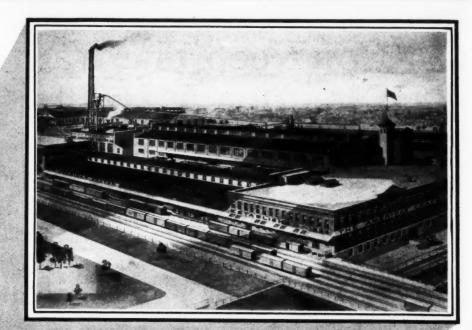
1. Since its operation, despite cuts in funds, the local board has closed each half year with a balance in its treasury.

(Concluded on Page 144)

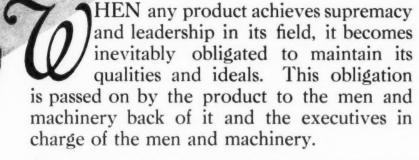
Statement of Budget Appropriations KENT PUBLIC SCHOOLS and Balances in Funds According to Appropriation Resolution Under Consideration September 2, 1927

B C D E F	Personal Service. Supplies Materials for Maintenance. Equipment Replacements. Contract and Open-Order Service. Fixed Charges.	Appropriation Year 1927 \$ 90,335,00 18,047.62 1,505.29 1,644.50 17,738.70 3,800.00	Appropriated \$ 52,848.81 11,623.70 1.085.57 911.70 15,340.16 2,568.02	Balances \$38,086.19 6,423.92 419.72 732.80 2,398.54 1,231.98
I	Contingent Fund	6,000.00	4.500.87	1,499.13
н	Totals Sinking Fund	\$139 671.11 41,944.98	\$ 88.878.83 15.660.67	\$50,792.28 26 284.31
	GRAND TOTALS	\$181.616.09	\$104.539.50	\$77.076.59

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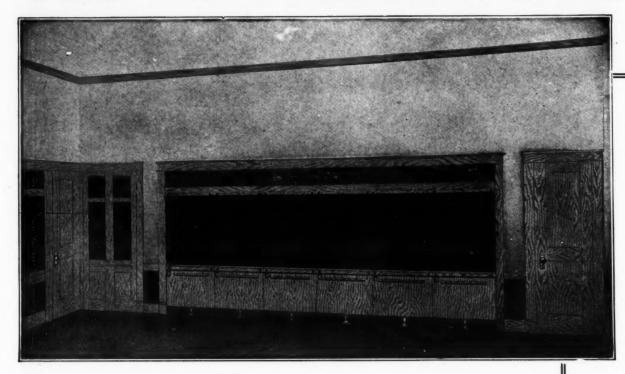
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FOR the teacher, the Miller has The advantages of perfect disci-pline and a definite dismissal point. It provides extra storage space, and stops petty thieving. Continuous panels of slate blackboard across the front of the wardrobe eliminate waste of wall space.

FREE! A 48-page, illustrated book-let, showing Miller School Wardrobes open and closed, in actual use in all types of schools and schoolrooms. Write for your copy. Ask for Catalog W-6. See address at left.

(Concluded from Page 142)

2. The members of the board are informed. at all times as to the condition of school finances. No expenditures are made on haphazard recommendation of school officials.

3. All items of improvements, and inauguration of new policies are discussed at the time of the preparation of the budget. The amounts are set up and the expenditure of money follows as a matter of course. Therefore, it makes for a wiser expenditure of funds.

4. It makes a progressive policy possible in dealing with replacements and new equipment.

5. An annual report can now be submitted to taxpayers such as would be submitted by any corporation handling large sums of money, showing in detail how the taxes for public education have been spent.

6. It enables school officials to check accurately whether the proper proportion of funds received is being spent for administration, salaries, maintenance, and under various other heads.

#### THE IMPROVEMENT OF TEACHERS IN THE SERVICE

(Concluded from Page 47)

substance back of it. Only substantial courses in accredited institutions should be recognized.

Substantial work having been required, adequate recognition should be given. This can best be done in the form of salary increments for advanced study. The advantage of an increment over a bonus system is, that an increment raises the salary level to be paid annually, while a bonus is a prize, paid but once, and leaves the salary level unaffected.

After the advanced-study increments have been earned and the teacher has been in the service of a given community for the prescribed time, the plan should include a leave of absence for further study and travel on full salary for one semester, or on half salary for the full year. If the half year on full salary is chosen, it can, of course, include the two vacation months. The work which teachers on leave propose to take should be submitted for approval before the leave is granted. It goes without saying that such salary increments should be paid only upon the return of the teacher to the service of the community which pays for such improvement of the service.

#### CLASSROOM REFINEMENTS

(Concluded from Page 63)

filing away copies of magazines, mounted display material, and other miscellany necessary to the effectiveness of the schoolroom. Teachers of geography or history, for example, constantly accumulate visual material which is best preserved by mounting on cardboard and filing away for use with the next year's class.

Teaching children to think rather than to memorize has become typical of school exercises. Much information casually gleaned from a wise selection of conveniently arranged books and magazines frequently stamps itself more deeply on the learner's mind than isolated facts learned under the impelling direction of the teacher.

The casual association of children and books promises much for the enrichment of education, and the reading case will undoubtedly come to be as essential to standard classroom requirements as blackboards and seating.

#### CREATING SCHOOL BOARDS IN PENNSYLVANIA

(Concluded from Page 112)

fit candidate, the judges have made the appointment accordingly. Regardless of any speculation as to whether the schools in these cities would be better or poorer under an elective school board, the fact remains that the people of Philadelphia and Pittsburgh are completely disfranchised so far as the government of their public schools is concerned. They vote for judges to serve ten years, and these judges appoint school directors for six years, with an automatic switch between the two terms that destroys the identity of any influence that might be assumed theoretically to extend over the sixteen years, from the casting of the vote for the judge to the close of the school director's

Bearing an important relation to all districts in common, stands the department of public instruction, at the head of which is the superintendent of public instruction.

The state constitution requires that this officer be appointed by the governor for a term of four years. He exercises wide authority in organization of the department, appointment of subordinates, determination of policies, enforcement of school laws, and administration of state school funds. Previous to the year 1919, the tenure of the state superintendent had been pretty stable, due in part, at least, to the fact that the office had been held by men of exceptionally winning personality, and that the duties of the office had been performed in so perfunctory a manner as to provoke no oppo-

#### THE SENIOR HIGH SCHOOL AND JUNIOR COLLEGE AT MUSKEGON, MICH.

The new Senior High School and Junior College at Muskegon, Michigan, which was described in the October issue of the School Board Journal was planned by Messrs. H. H. Turner and V. E. Thebaud. architects, of Grand Rapids, Michigan. Mr. Wm. B. Ittner, F.A.I.A., of St. Louis, Missouri, acted as the consulting architect of the board of education in the planning of this building.

L. N. Emrick, superintendent of the Israel township schools, near Eaton, Ohio, was elected president of the Pueblo county teachers' institute.

The Wyandot, Ohio, county teachers' institute elected L. H. Houpt as its president. V. A. McBeth was elected vice-president, and Miss Bessie Flicker,

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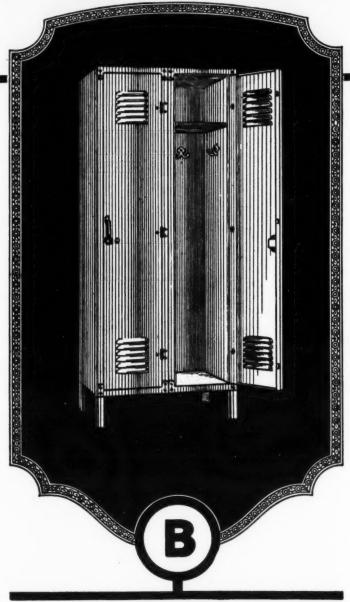
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120 to 200 desk-tops can be made new in a day-800 to 1600 square feet of flooring made beautifully smooth in eight hours! The CLARKE pays for itself on this work alone in a very short time. Over the week-ends - summers - this machine is used to keep the building and equipment in tiptop condition. Truly, "There is no vacation for the Clarke Vacuum Portable Sander."

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Weighing only 22 pounds, and absolutely dustless in operation, it protects them from strain — and dust-tainted air. Slash your maintenance cost—as hundreds have done. INVESTI-GATE the CLARKE AT ONCE!

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And this opinion is shared by hundreds of other schools which use the Powerful, Fast-Cutting Clarke Vacuum Portable Sander for maintenance and instructional work.



ACCOUNTING FOR INTERNAL SCHOOL FUNDS IN EL PASO

Under a system of internal accounting maintained in the schools of El Paso, Texas, funds collected in the schools but which do not belong to the school treasury are mainly derived from (a) admission charges to school entertainments and community affairs, and the sale of tickets on a commission basis, where the school helps in an affair not given in its building; (b) lunchroom profits, candy, etc.; (c) collections or dues, and contributions from children and teachers for various school purposes.

A written accounting of all school funds must be made by the principal; if a teacher is delegated the responsibility for the financial management of a certain affair, the principal will still be held re-sponsible as head of the school and he is held accountable for loose or improper handling of the accountable for loose or improper handling of the

Funds of parent-teacher associations derived from school sources must be reported by the principal just as other school funds are, even though such funds are covered into the treasury of an such funds are covered into the treasury of an external organization. The principal must report in writing clearly on all finances connected with the school as follows: (a) the source of the fund and gross proceeds; (b) the expenses incurred in raising the fund; (c) the application of or expenditures from the fund; (d) the balance on hand, how held, and how expected to be used.

School lunchrooms under the supervision of the

School lunchrooms under the supervision of the parent-teacher associations must report to business office on all finances each month. The manager must report to the parent-teacher association or to the principal. A daybook should be used in which are kept the expenditures and receipts for each

In another book each transaction is explained in detail by a voucher signed by the teacher or other

person in charge. These vouchers for each month are kept in a separate envelope and are filed over a period of not less than three years.

Tuition, cafeteria funds, and textbook funds are

reported on special forms.

Permitting teachers to sell paper, pencils, etc., without accounting to the principal's office is evidence of loose business management.

#### SCHOOL ADMINISTRATION

-At Gary, Indiana, 800 white students attending the Emerson high school went on a strike because 24 colored students had been transferred to cause 24 colored students had been transferred to the school. The strikers assembled in the school yard and directed jeers and jibes at those who started for the building. Warned away by teachers, they assembled in a park some blocks away. They carried banners bearing the inscription, "We don't go back until Emerson is white." The board yielded by segregating the negro pupils.

A resolution introduced in the St. Louis, Mo., board of education by Arthur Blumeyer, a member, calling for the establishment of a bureau of research is regarded as a move to take the rating of teachers out of the hands of Superintendent Maddox. The

out of the hands of Superintendent Maddox. The resolution was laid over for future action.

—The board of education of Tacoma, Wash., elected Ellis H. Rogers to a position in the high school against the protest of Superintendent William F. Geiger. Mrs. Victor Miller and R. Lester Kelly, minority members, protested against the appointment, contending that it was irregular and a slap at the superintendent. a slap at the superintendent.

—A phenomenal success has been attained by the evening schools at Buffalo, N. Y. During the school year 1926-27 more than 28,000 people attended evening schools. All of these students were over 16 years of age; the average age was 31 years. The students were from all walks of life and from the students were from all walks of life and from the students were promisely with the world. almost every nationality in the world. Practically every trade of the city was also represented. A wide variety of cultural as well as vocational courses was given. Whatever course 15 or more people wanted was offered, provided a good teacher could be found.

-The school department at New Bedford, Mass... issues once each month, a printed one-page circular, entitled "Do You Know." The pamphlet tells some of the interesting things about the schools and gives statistics concerning the population, the enrollment, and the ranking of the city among the 39 cities of the state. The sheet is of interest to school

patrons and to the public as it gives the information which they wish to know.

The opening of the school session of 1927-28 —The opening of the school session of 1927-28 at El Paso, Texas, was attended with some changes in personnel. Mr. W. A. Stigler, who has been the head of the Junior College for the past two years, is now directing head of the School of Education in the Texas School of Mines, and also acts as assistant superintendent of the El Paso schools.

—Ludington, Mich. The board of education has this recommendation of the school of the school

this year inaugurated a transportation system for pupils of rural schools who attend the city schools. The cost of transportation, it is estimated, is less than fifty per cent of the cost of maintaining rural schools for these pupils.

—Dubuque, Iowa. The work of individualizing instruction begun last year, has been continued for the present school year. In order to promote the work among the teachers, a course of instruction was offered covering the use of standard tests, or the school year of the school year. grading, tabulating, and administering them. The course was in charge of the supervisor of elementary instruction.

-Chicago, Ill. School attendance in the Chicago schools has reached a total of 436,216, or an increase of 35,016 over last year, according to figures compiled in September. The high schools had an attendance of 69,779; the junior high schools, 22,402, and the elementary schools, 329,384. The largest increase in the high schools was at Calumet, which enrolled 2,466 students, as compared with 1,659 last year. Seven high schools reported a greater enrollment on the first two days than the peak of last year.

-The Bureau of Education of the United States Interior Department has announced the establishment of a clearing house on current research work in education for assisting universities, colleges, and other educational agencies in eliminating wasted effort and duplication of work.

Through the new clearing house, all educational research agencies will be in position to obtain firsthand information on research work in education and in arranging new studies will be able to ascertain whether they have duplicated studies conducted elsewhere. The work of the clearing house ducted elsewhere. The work of the clearing house will be performed by the present staff of the Bureau, in addition to their other duties.

-In New York City the naming of teachers is placed in the hands of a board of associate super-



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intendents. In opposing this method, William E. Grady, district superintendent, in a public address recently said: "Why place the power of nomination of district superintendents and directors in such a body, when the mode of election and limitation of term of its members tends to make them susceptible to the demands of political agencies? How strong is the temptation to permit the statutory rights of independent decision to shift to political leaders!" Supt. Grady added that in order to modernize the system of administration the superintendent should be vested with the right to choose for his term his own assistants, qualified to carry out the policies to be inaugurated. "The superintendent might then be justly held to a strict accountability for honest, diligent and effective performance on the part of himself and his personally selected staff."

—New York, N. Y. As a result of home study during the summer, 179 students of the Jefferson High School of Brooklyn passed the September school examinations in the subjects in which they were deficient or qualified for advanced work.

Under a system in operation at the Jefferson High School, pupils who are unable to attend one of the summer high schools, are given permission to take out books over the summer and to study in preparation for an examination given on the day school opens in September. Pupils who have attained good averages are permitted to try to advance a term of work; pupils who have failed are given permission to try to remove their condition in the fall.

It is brought out that in June last, permission was given 553 pupils to take out books and to study during the summer. In September 418 of these pupils appeared for the examination, and 179, or 42.8 per cent succeeded in passing. Except in a very few cases, pupils were allowed to take an examination in one subject only.

examination in one subject only.

Dr. Elias Lieberman, principal of the school, has compiled figures showing that the effort on the part of the teachers in preparing and correcting the examination papers is worth while in view of the fact that 179 pupils succeeded in passing the required tests. The passing of this group of pupils represents the work of one teacher with five classes for an entire term.

—The insurance committee of the Detroit, Michigan teachers' association has directed its efforts

during the past year to a study of different types of insurance, and to the preparation and publication of reports regarding the various types. Among the topics taken up are the purposes of insurance, the characteristic form of life-insurance policies, sickness and accident insurance, and the trends in present-day insurance.

During the present year the committee aims to study and report on the insurance plans which have been adopted by other teacher-organizations elsewhere, and by organizations of city employees in Detroit. It is planned to gather possible plans by means of which Detroit teachers may secure more adequate protection at a lower rate than they could individually obtain.

—New York, N. Y. Absent teachers in the public schools are costing an average of \$7,704, according to board of education budget estimates for 1928. Of the total, absent teachers in the elementary schools are responsible for \$6,309, while regular substitutes for absent high-school teachers account for \$1,290.

—Cambridge, Mass. The school board has voted to refuse pay raises to teachers, principals, secretaries, or clerks. The board's decision affects 650 teachers and culminates a controversy over wages which had existed for almost two years. The situation resulted a short time ago in the establishment of a teachers' union affiliated with the American Federation of Labor.

—Complaint has been made by the teachers' council of New York City against conditions which are causing an increasing number of absences among the 30,000 members of the teaching and supervising staff of the schools. Traveling with the rush-hour crowd, overcrowded school buildings, too frequent interruptions of classwork by contests and competitions, insufficient salary, and disciplinary problems were cited as conditions operating disastrously against teachers and pupils. The situation was revealed by the council's committee on organization and administration in its special report on conditions producing an increased number of applications for absence refunds among the teachers.

To remedy the conditions the council, upon the advice of the committee, recommended that the following steps be taken:

1. That the board of education be asked to expedite any feasible plan for breaking up the rush-hour crowds.

2. That the appropriate committee of the teachers' council be asked to make a study of the scheme in use in Massachusetts of having a week's vacation at the end of February and that an early report be brought in.

3. That the board of education be asked to increase the number of teachers to whom sabbatical leaves are granted for the spring term of school.

4. That the board of education be asked to equip all new school buildings over three stories high with elevators for the use of pupils and teachers.

5. That the question of the relative value of the various contests and competitions held in the schools between September, 1926, and June, 1927, be studied by the appropriate committee and that a report be given promptly.

6. That the attention of the board of education be called again to the need of more laboratory schools.

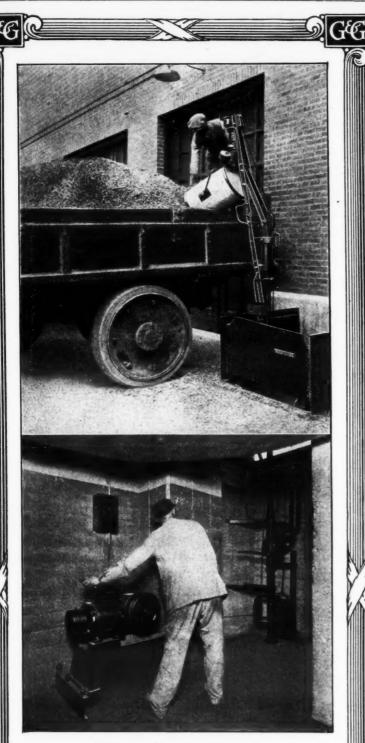
7. That parents be asked to make more extensive use of the opportunities offered by "open school week" in order that there may be greater cooperation between the home and the school.

8. That the recommendation of the superintendent of schools, Dr. William J. O'Shea, that principals assign newly appointed teachers to grades in the second and third years be heartily indorsed and that principals and supervisors be urged to give sympathetic guidance to younger teachers in order that the schools may reap the greatest possible benefit from the enthusiasm and energy of youth.

9. That the board of education be asked to establish a maximum pupil-period load for teachers.

—Francis Chary, who sued the Minneapolis board of education for reinstatement as principal of the high school and the recovery of \$3.500 as back salary, lost his case. He claimed that his resignation had been obtained by coercion. The court threw out the case, holding that the principal had no cause for action.

—The West Virginia legislature has passed a law which amends the Barnes law of 1925, relating to the interest of officers in contracts. Under the law it will be unlawful for any member of a school district or county board to become directly, or indirectly, interested in the proceeds of a contract for furnishing supplies to schools. A fine of not less than \$100, nor more than \$2,500, or imprisonment for one year is provided for failure to obey the law.



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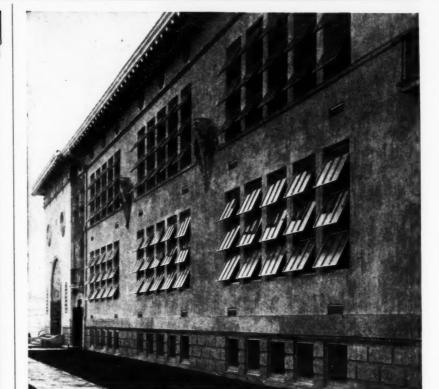
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of children's stories, old and new. She has brought them from the golden East, from the cherry groves of Japan, from the willow brooks of China, and from the Northlands. But, the Italian and Spanish are not forgotten. There are also little Turks and little Redskins who figure in the stories.

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more besides.

The illustrations, which are well done, consist of pen drawings and color engravings.

Goose Towne Tales

By Alice Lawton. Cloth, 240 pages, 8 vo., illustrated. Price, \$2, net. Published by Thomas Y. Crowell Co., New York City.

This book contains a collection of delightful children's stories. Incidentally it tells how Mother Goose came to tell so many interesting tales. It was Father Goose who inspired them and who now tells how it all came about. He then opens his bag of new stories, fascinatingly presented, and handsomely illustrated.

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The publishers have given the book a holiday opearance. The cover design is illuminated in appearance. The cover design is illuminated in color in which a group of young and old are engaged in an open-air dance.

The Last of the Mohicans

By James Fennimore Cooper. Cloth, 505 pages. Published by The Macmillan Company, New York

Indian stories rise and fall in popularity but "The Last of the Mohicans" seems to hold the undiminished regard of all lovers of American fiction relating to Indian and pioneer life. Despite its obvious shortcomings as viewed by a reading public accustomed to realism in current literature and the movies, Cooper's masterpiece still is an

absorbing tale that carries away the reader and holds his interest to the last episode. The present edition is edited for school use and is at the same time suited in format for the home library.

Blackbeard's Treasure
By T. E. Oertel. Cloth, 384 pages. Price, \$2, net. Thomas Y. Crowell Co., New York City.
Stories of piracy will always have an attraction for live boys and always will give authors an opportunity for glorifying adventure and bravery, and life on the seas. But the writers of these stories will also always face the difficult problem of meting out poetic justice; of so combining epi-sodes and character delineations that the reader's admiration for the bravery and strength displayed does not become sympathy for misdeeds, cruelty, and crime. The margin between the wholesome and the harmful is always narrow and the charm ulti-mately of a narrative lies in the fact that right prevails.

The present book is a story of a boy's adventures with Captain Teach, and while it has the tang of the sea and the spirit of wild adventure, the adult reader will find it hard to determine whether the author sympathizes with the pirates or their victims, with some of their cruelty or the suffering caused by them.

Artist, typographer, and bookbinder have combined to make this volume most attractive.

By L. Lamprey. Cloth, octavo, 320 pages. Price, 75 cents. Little, Brown & Co., Boston.

Ancient Gaul before the time of Cæsar—what an

alluring topic for a book of children's stories, filled with facts of tribal customs, religious superstitions, wars, migrations, barter and trade, handicrafts, etc! The available materials for such a book are meager indeed and if the author has lapsed here and there from the hard facts presented by authorities on the cave pictures of the prehistoric cave dwellers, the sea journeys of the Phoenicians, the land journeys of the Greeks, and the final comings of the Romans, he has made the picture realistic and interesting, and worth reading in school. The book is well illustrated.

Introduction to World Geography
By Philip A. Knowlton. Cloth bound. 298 pages.
Illustrated. Published by The Macmillan Company, New York City.

The approach to this geography is centered upon the occupations of man. The thing that he does indicates also his environment, and his mode of

Thus we see activities in city and country. in the North and the South, in the East and the

West, on land and on sea, and in all parts of the world. The text not only tells how people work but also how they play—young and old.

The illustrations cover a wide range of subjects. In fact, they give the book a peculiar charm. We all love to see people in far-off lands and learn just what they are doing and how they live. The supply of colored and outline mans is liberal.

supply of colored and outline maps is liberal.

The author announces in his preface that the book is intended to be used as a first textbook in geography except in schools which prescribe a thirdgrade text. It is intended to serve beginning with the fourth grade as an introductory to the subject.

American Council Alpha French, German, and

American Council Aipna French, German, and Spanish Tests
By V. A. C. Henmon, A. Coleman, Marion R. Trabue, B. Q. Morgan, Stella M. Hinz, C. M. Purin, Elizabeth Rossberg, M. A. Buchanan, J. P. W. Crawford, Hayward Keniston.
The tests were prepared for the Modern Foreign Language Study, under the auspices of the American Council on Education and are intended to measure important aspects of achievement and

measure important aspects of achievement and progress in the ability to read and write French, German, and Spanish. The tests are issued in two parts and require two class periods for administration. The vocabulary tests consist of 75 to 100 words in the respective languages, each of which is followed by five English words. There are also grammar, silent reading, and written composition tests. Directions are given for administration, scoring, recording, and translating scores into marks. The tests have been carefully standardized and norms have been established.

American Council Beta Spanish and Beta French

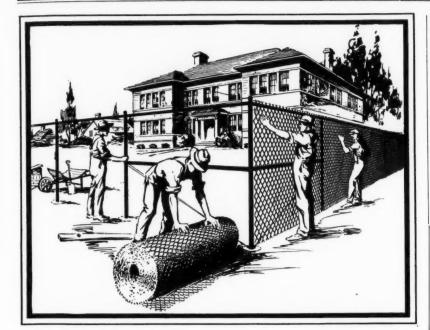
By Frank Callcott, R. H. Williams, Jacob Greenberg, and Ben D. Wood.

These tests were designed to provide the junior-

and senior-high-school authorities with reliable, valid, and comparable measurements of achievement in French and Spanish. Each of the tests consists of three parts, namely, a vocabulary test of 100 test graded according to difficulty, and a grammar test of 65 English sentences, including an incomplete translation to be completed by the student.

The tests are adapted to the whole range of achievement in junior and senior high schools and

(Continued on Page 153)



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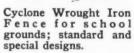
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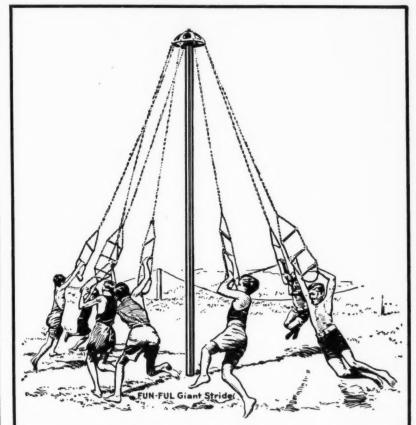








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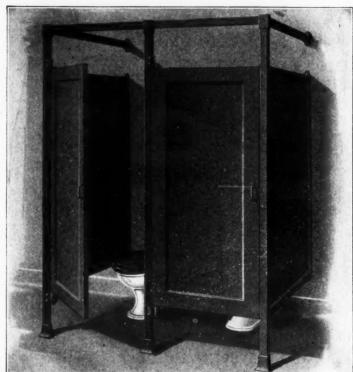
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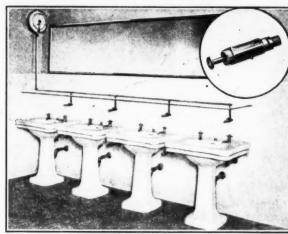
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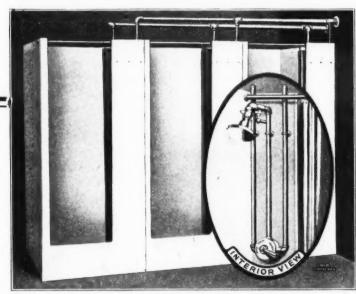
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for individual examination.

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The Squirrel Tree

By Margaret J. McElroy and Jessica O. Younge. Cloth bound, 94 pages. Published by American Book Company, New York.

This is a delightful children's book which tells of two children who lived in the vicinity where squirrels are common. It also enters into the play life of these children, their experiences at home and out in the open air. The squirrel remains their

and out in the open air. The squirrel remains their playmate throughout the book.

The publishers present the text in large and readable type and engage in a series of colored illustrations which are most attractive.

A Child's First Book in Reading
By Margaret J. McElroy. Paper cover, 32 pages.
Published by American Book Company, New York

City.

The small child beginning to read will see himself in this book pictured as he is at home, going to school, and while at school. These pictures, which are neatly drawn and presented in color, are bound to attract the children, and excite their

curiosity sufficiently to examine the text. All the pets that children enjoy are running through the pages. A teachers' manual accompanies the book. Publication Received

Number Friends

By Inez M. Howard, Alice Hawthorne, and Mae Howard. Cloth, 242 pages. The Macmillan Co., New York City.

A happy introduction to arithmetic is provided in this attractive primary text, based on child in-terests and play activities and intended to develop a number sense from the very beginning of children's school lives. Numbers are interesting, useful friends with whom children come into constant contact at home, on the playground, in the store, at school, and wherever children do interesting things. These friends have peculiarities with which children may become familiar in a happy way by games and play, and by doing things which grown folks Thus, facts about numbers, counting, addition. and subtraction, and drill in these fundamental operations no longer are dry as dust, to be learned by dreary rote, but they are learned almost un-consciously and become a part of the child's natural development. The book is carefully graded on the basis of tested achievements of children in the authors' classes.

Minimum Essentials of Mathematics

By Daniel W. Werremeyer and Charles H. Lake, loth. 244 pages. Price, \$1.16. Silver, Burdett &

Cloth. 244 pages. Price, \$1.16. Silver, Burdett & Co., New York City.

Mathematics has been developing in our high schools along two lines. The old, formal mathematics preparing the student for college or pro-fessional work still prevails in a majority of schools and has been made practical by the introduction of many elements intended to prepare for immediate use in industry and life. A second type of mathematics instruction frankly assumes that students will not go to college and will not have use for mathematics except in the ordinary avocations, the trades, commerce, and the home. This type of work has limited itself to minimum essentials of arithmetic, algebra and geometry and has emphasized the application of principles and methods to a wide variety of practical everyday mathematics as it has been found in the store, the office, the shop, the home, the factory, and the The present book is of the latter type of mathematics texts and leads the student from a thorough review of fundamental operations through the simple principles of algebra to a study of a few simple geometric problems. The strongest emphasis is on algebra and the use of algebraic methods in the solution of everyday problems. The authors constantly emphasize the sense of number relations.

Breed-French Speller
By F. S. Breed and Wm. C. French. Book Three. Cloth, 100 pages. Lyons and Camahan, Chicago,

This seventh-grade text provides material based upon recent curriculum study. The authors hold that both the sociological and psychological view-points of curriculum building must be adopted in preparing a text in spelling in order that material and methods may be quite adapted to the needs, abilities of children, and to the effective and economical mastery of the subject.

Our Neighbors in South America By Walter Lefferts. Cloth, 306 pages. Price, \$1.20. J. B. Lippincott Co., Philadelphia, Pa.

The geography and the peoples of South America are made very real in this interesting, well-illustrated travel reader, in which four American children are carried to all the countries, to the main seaports, over the Andes, up the Amazon, and through coffee, rubber, and coffee plantations. The descriptions have a quality of vividness not usually found in supplementary readers, and the device of recounting the observations and experiences of the four children contributes much to keep up the in-terest. Topics selected for each country are well chosen to reinforce formal textbook study, and the language is adapted to the abilities of ten- or eleven-year-old pupils.

Progressive Word Studies
By J. N. Hunt. Cloth bound, 232 pages. Published by American Book Company, New York City.
The selection and grouping of words has been made in the light of more recent investigation into the subject of spelling. It is primarily a speller with the addition of such features as may render the study more practical and efficient. The grouping of words is based upon similarity of sound, form and meaning.

The arrangement of the book is such that each page provides for a week's work. Test reviews are provided. The text is presented both in script and

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The "Viking" is constructed to withstand the severest use to which it may be subjected in school use. Built of 20 gauge steel throughout, and reinforced at all the vital points, it gives an assurance of dependability and indestructibility. These features coupled with its fireproofness and the fact that it cannot be bent or sprung out of shape provides a folding chair without an equal.

# MAPLE CITY STAMPING CO., Peoria, Ill.

print. The marks of accent are supplied wherever it is believed that they are needed. Instructions to the teachers in the use of the book are provided. The Scholarship of Teachers in Secondary Schools

By Edward A. Fitzpatrick. Cloth bound, 109 pages. Published by The Macmillan Company, New York City.

This little book contains the Sachs-prize essay of 1926 which had for its purpose the raising of the level of scholarship, the background of knowledge and the breadth of view of the secondary togethers.

The author approaches his subject by describing the general conditions affecting scholarship. He discusses the size of the secondary-school problem as well as the nature of that problem. The several subjects taught in the high schools are enumerated.

The teacher situation is reflected in the age of the teacher, showing that the greater number of those serving in the high school are quite young. The turnover of teachers, as exemplified in several states, is altogether too frequent. Questions of migration, tenure, salaries are discussed.

The book gives special attention to facts about the training of teachers, and the requirements exacted by the several states. The German system of teacher training, in contradistinction of that pursued in this country, is described. Also what may be learned from the German experience.

The general summary made by the author is quite thorough and illuminating. It sets forth the value of a mastery of specific subjects as against general scholarship.

The Tired Child

By Max and Grete Scham. Cloth, 342 pages.

Price, \$2. J. B. Lippincott Co., Philadelphia, Pa.

This study of fatigue in children is addressed to physicians, educators, and intelligent parents, and suggests useful ideas for the prevention and management of chronic fatigue. The authors understand the problem thoroughly from the physician's standpoint, but some of their points-of-view and suggestions will not be so readily accepted by educators and by parents who have the entire mental and spiritual, as well as the physical, regimen of their children's lives well in hand.

#### PUBLICATIONS RECEIVED

Alcoholism Among Parents of Juvenile Delinquents. A reprint of a paper printed in the Social-

Service Review in September, 1927. This paper represents a study of a group of delinquent children who had been referred to the courts. In the study, the facts with reference to the incidence of alcoholism among the parents of a group of delinquent children have been assembled. The basis of the study was information obtained from the case records of 2,378 delinquent children whom the juvenile court referred to the clinic during an eight-year period.

Educational Tests for Use in High Schools. By Charles W. Odell. Bulletin No. 48, April, 1927. Published by the Bureau of Research of the University of Illinois, Urbana. The pamphlet outlines the purpose, use, and results of standard tests and offers a rather complete list of the tests now in

the market.

Standardization of Builders' Hardware. Simplified Practice Recommendation No. 18, 1927, of the division of simplified practice. Price, 10 cents. Issued by the Superintendent of Documents, Government Printing Office, Washington, D. C. The present simplification is an outgrowth of the preparation of specifications by the technical committee on builders' hardware, and involves the rules, practices, finishes, types, and sizes of hardware. The list of hardware includes schoolhouse hooks and locks.

Individualizing Geography Instruction. Supplement No. 1 to course of study in geography for junior high schools. Issued by the division of secondary education, board of education, Baltimore, Md. This supplement and supplement No. 2 to be published later, will comprise a revised course of study in geography for the junior high schools of Baltimore. The pamphlet discusses geography instruction, individualizing instruction, directed study, visualization, library reading, dramatization, and extracurricular activities. The pamphlet also includes a list of instructional material, books, and maps to be consulted in connection with the teaching of the subject.

Present Status of Consolidation of Rural Schools in Kansas. By Edgar Mendenhall, Pittsburg, Kans. The pamphlet shows the status of consolidation in the rural schools of Kansas and gives facts on attitude toward consolidation, transportation, and results of the plan. The material is taken from reports of county superintendents for the last year.

Hygiene and Sanitation

The Family Budget—What It Is and What It

Does. Five essays written by high-school seniors.

Issued by the Union Trust Company, Detroit, Mich. The five essays presented in this little pamphlet of 45 pages were the work of a group of high-school seniors who won \$1,000 college scholarships. All of the essays tell what the budget is, what it does, and how it enables the family to meet all its financial problems.

#### RECOMMENDS AUDIOMETERS FOR TEST-ING HEARING

—The use of phonograph audiometers to detect hearing defects in school children has recently been recommended by the Commission of Education of the American Federation of Organizations for the Hard of Hearing, according to a statement of the United States Burgan of Education

United States Bureau of Education.

It is recommended that a different type of audiometer be used where the tests are made individually as is the case with children in the first and second grades.

On the basis of tests already made, which showed that 14.4 per cent of those tested had some hearing defect, there should be over 3,000,000 school children so afflicted.

The apparatus consists of a phonograph using special records of simple numbers and having telephonic apparatus such that the numbers on the records are picked up electrically and conveyed to as many as forty children at one time through telephone receivers. Forty children are seated at desks, provided with pencils, record sheets, and receivers from the five trays, each holding eight receivers. The trays are electrically connected by cords terminating in plugs. The receivers are placed over the right ear and the children hear first from the phonograph the opening sentences. They write the numbers they hear in the proper column as the intensity of the sound gradually and uniformly decreases. The test is given twice, by a man and by a woman. The receivers are then changed to the other ear and the test repeated.

For testing the upper grades, three digit numbers are used; for the lower grades, two digit numbers. Individual tests must be used for the younger children in the first and second grades.

The test papers showed a number of children who failed to record numbers below a certain level. Some of these were actually hard of hearing, while others failed for other reasons. It is necessary to retest about twenty per cent of the children in each group in order to eliminate all except the hard of hearing.

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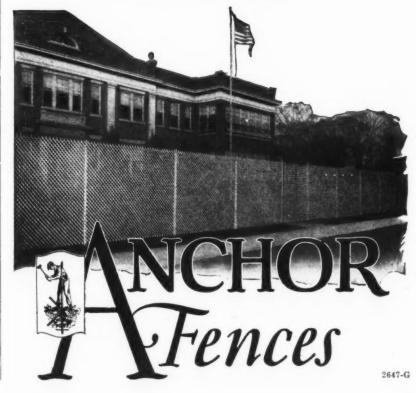
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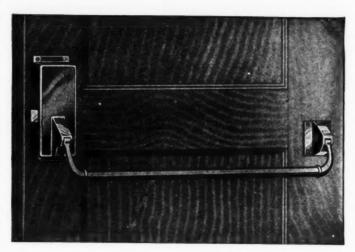
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Made to meet the use and abuse to which a school door lock is subjected.

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WRITE CATALOG

### PUBLICATIONS RECEIVED

Are College Students a Select Group? By Charles W. Odell. Price, 25 cents. Issued by the bureau of educational research, University of Illino.s, Urbana. Dr. Odell, in this his latest bulletin, presents information relative to a group of high-school graduates who actually entered college. In addition to the value of the facts reported, the study demonstrates the need for more critical evaluation of data in conducting educational research. The report gives the evidence as to the selection among college students in general, differences between the groups of freshmen attending various institutions of higher learning, and differences among students. of higher learning, and differences among students carrying various subjects. As a result of the study, Dr. Odell finds that there is a small but reliable difference in ability between high-school seniors who plan to attend college and all seniors, the former, of course, ranking slightly higher. A decidedly greater difference exists between those who become college freshmen and all high-school graduates. The of superior over inferior college freshmen is probably 25 per cent greater than the corresponding figures for all high-school graduates.

Grain Through the Ages. By Grace T. Hallock and Thomas D. Wood. Paper, 96 pages. Published by the Quaker Oats Company, Chicago, Ill. This booklet is a history of grain from the planting booklet is a history of grain from the planting and reaping to the milling and purchase by the consumer. The author uses to the fullest her ability in dramatizing child health and the result is a fine product of the book field. The book is illustrated with a number of fine halftones in color. Child Accounting in Indiana. By Blanche Merry. Bulletin No. 85, 1926, issued by the Indiana State Education Department, Indianapolis. The pamphlet gives the history of the development of the child-accounting system in Indiana, and offers a number of tables and charts to show the present status of

of tables and charts to show the present status of

Beginner's Book in Writing and Spelling. Norman H. Hall. Paper, 48 pages. Issued by Hall & McCreary, Chicago, Ill. The book serves as a simple introduction to writing and spelling preceding the formal study of these subjects, and the lessons form purposeful activities of great value to the beginner. The lessons take the form of seatwork and the character of the work offered is such as to lead to the establishment of correct responses and habits on the part of the small child. The material in the book is based on the spelling

needs of beginners as determined by W. F. Jones and on the vocabulary findings of A. I. Gates.

The American Council French Grammar Test. preliminary experiment at the University of Wisconsin. By F. D. Cheydleur. Bulletin No. 8, March, 1927, issued by the bureau of research, University of Wisconsin Median Theorem versity of Wisconsin, Madison. The pamphlet represents a group of tests for measuring the achievement of students in the secondary school and higher levels and was prepared under the auspices of the American Council on Education, with the cooperation of the Modern Foreign Language Study and other organizations. The test has been tried out in the University High School and has been used in approximately one hundred schools and colleges in approximately one hundred schools and colleges in various parts of the United States.

An Evaluation of Three Technics for Improving Ability to Solve Arithmetic Problems. By O. S. Lutes. Bulletin No. 6, June, 1926, issued by the College of Education of the University of Iowa, Iowa City. The present pamphlet has been prepared by the author as a means of improving the problem-solving question in the elementary schools. One of the main purposes of the study is to evolve effective classroom technics for use in this field. is brought out, as a result of the study, that motivation is an important factor in securing improvement in problem-solving ability. This is supported by the fact that the control group made the second largest gains of the four groups, and that all groups made greater than normal or expected gains. Again, it was proved that improvement in computational accuracy does increase the ability to solve verbal problems; whether it increases ability to do arithmetical reasoning cannot be stated from the results of the study. The author discusses gains on the Stanford achievement test, gains by mental-age groups, results of compass diagnostic test, and correlation of computation and reasoning.

The Time Factor in Arithmetic Tests. By L. J. Thies. Bulletin No. 2, February, 1926. Issued by the College of Education, University of Iowa, Iowa This pamphlet represents an time given to topics in texts in which the author shows not only the gross times spent on topics in two texts for grades five and six, but how these times were spent when the text was taught as printed. A study of the time distributions on the several topics or skills as provided in the two texts shows the difference in texts as learning instru-

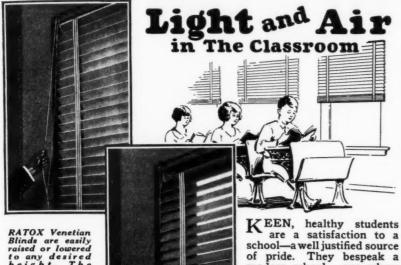
ments. The monograph should prove highly interesting to superintendents, principals, and teachers who are concerned with significant facts relative to arithmetic textbooks.

A Method for Rating the Drill Provisions in Arithmetic Textbooks. By O. S. Lutes and Agnes Samuelson. Bulletin No. 3, March, 1926. Issued by the College of Education, University of Iowa, Iowa City. The study aims to do three things: It presents the analyses of the drill provisions of six well-known arithmetic taxts, it presents as well-known arithmetic taxts. It presents the analyses of the drill provisions of six well-known arithmetic texts; it proposes a sys-tem of tables to use in analyzing the drill pro-visions of arithmetic texts, and it proposes a sys-tem of interpreting or rating the drill aspects of texts so that a textbook committee may arrive at a quantitative rating of drill provisions in texts which at least begins to be objective rather than subjective in nature. The booklet offers suggested procedures for rating drill provisions, gives tables showing analyses of drills, and instructions for

Games and Equipment for Rural Schools. Marie M. Ready. Physical Education Series No. 8, 1927. Issued by the U. S. Bureau of Education. The pamphlet has been prepared for the benefit of rural teachers who are located in states which do not provide books on games and stunts. The pamphlet lists outdoor games, indoor games, and special courts and equipment for active games. A selected bibliography is appended for the use of the teacher.

School Buildings, Sites, and School-District Bonds. Law Pamphlet 1, No. 868, January, 1927. Issued by the University of the State of New York, Albany. This pamphlet gives information on the selection and acquisition of sites, the erection of new schools, and the alteration and improvement of existing school buildings. The booklet will be found especially helpful to school boards contemplating the erection of new buildings. A careful study of the pamphlet and an intelligent observance of the directions it contains will, it is hoped, enable school officials to perform their duties and avoid the difficulties encountered in the various steps leading to the erection and completion of a school building.

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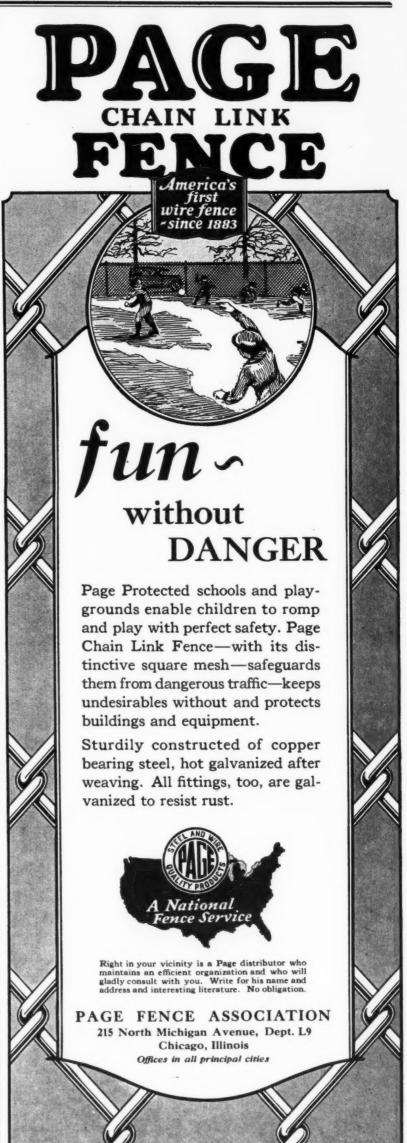
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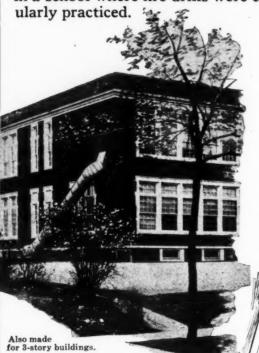
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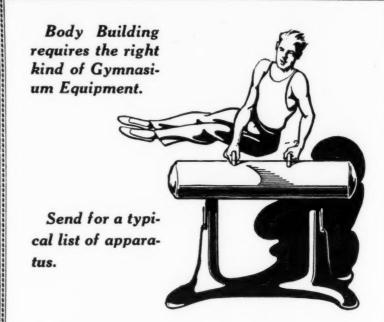
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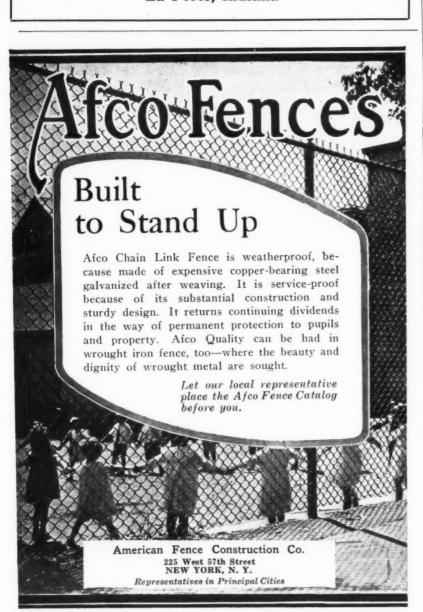


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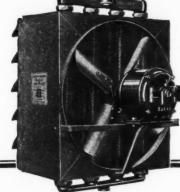
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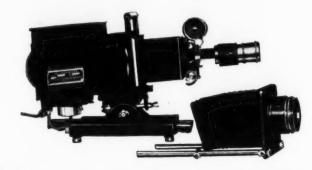
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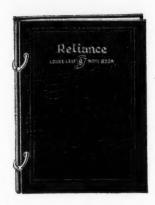
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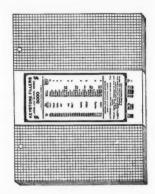


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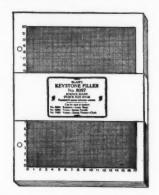
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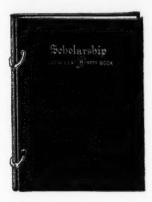




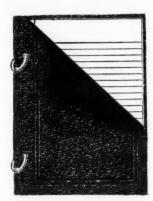
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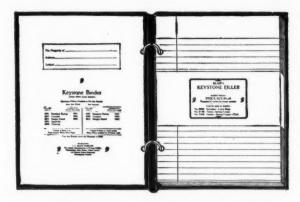




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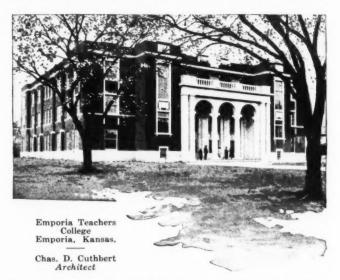


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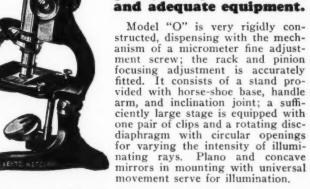
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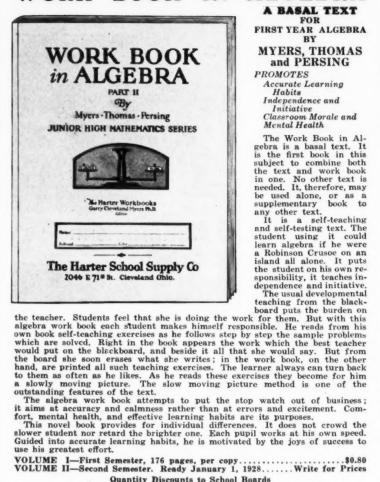
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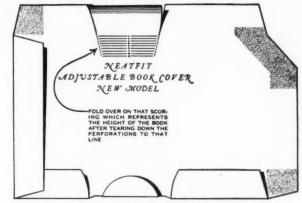
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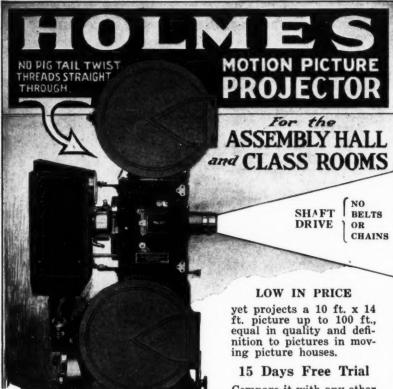
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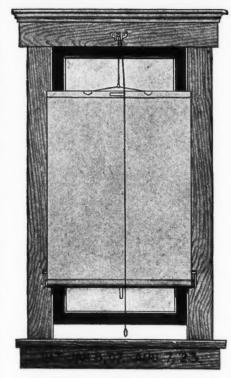
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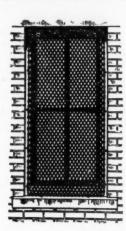
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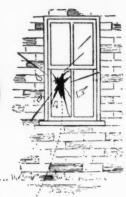
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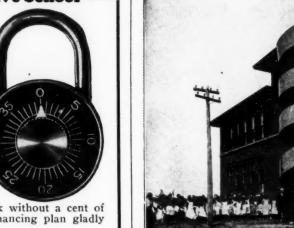
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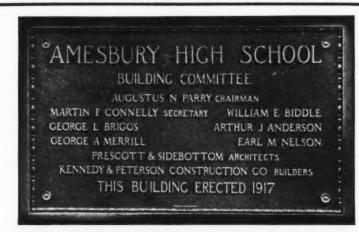
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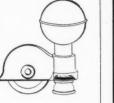


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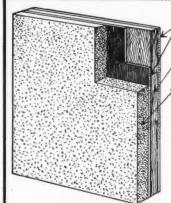
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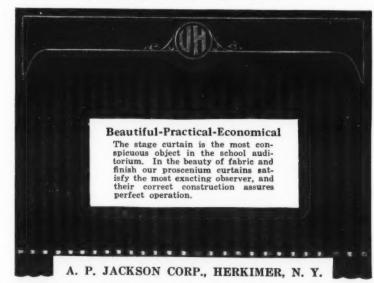
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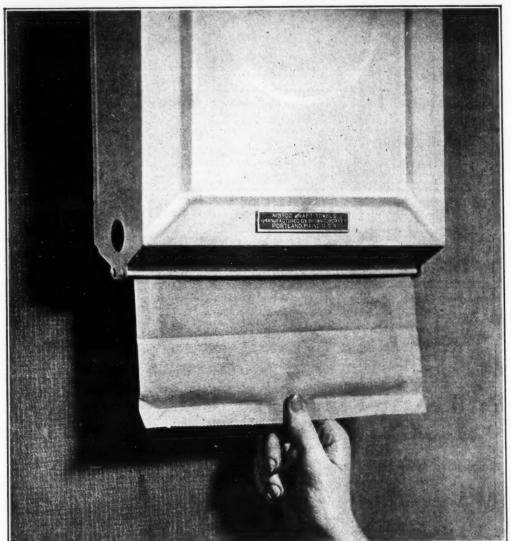
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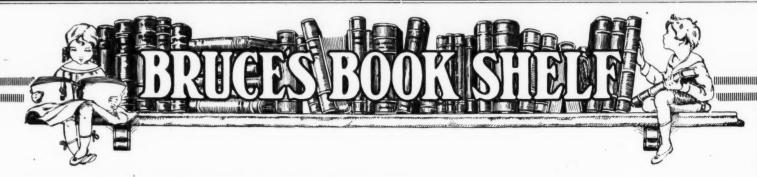
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#### FALSE ECONOMY

Mr. Willis A. Sutton, Superintendent of Schools, Atlanta, Georgia, who recently had a very sprightly joke in this column, sends us another bit of humor about a Connecticut Yankee. It is a very fine joke to use, when you are called upon or urged to speak unexpectedly or rather against your will, which is generally the condition under which you make a speech in school circles.

A Connecticut Yankee came south not so much for the climate but to save money. He somehow figured that gasoline to Florida would cost less than a coal bill in Connecticut. And he came to Florida, was much carried away with Daytona, was especially interested in the flying machine on the beach. He several times looked at it, spoke to his wife, saying, "Sarah, I'd like to fly." "Why don't you fly?" she said.

"Because it costs so much I am afraid to ask the man."

"Well, I'll ask him for you." Whereupon she inquired and found it cost \$5 for five minutes.

He shook his head and said it was too high. From day to day he continued to watch the flying machine. At last the pilot, who had a good sense of humor, said: "I can tell you one way that you can fly, and it won't cost you anything. If you will get in this flying machine and go up with me, don't grunt, don't make any noise whatsoever, don't scream, then you can have your trip free of cost."

He looked at his wife, and said in a rather dubious manner: "Sarah, you know women's failing; I can keep my mouth shut if you can." They stepped in and went up in the air. The driver was sure that when he glided off like a bird that they would catch their breath and scream as other passengers had done; but he heard not a sound. He was satisfied he could make them scream by going up into the air and looping the loop; still not a sound. He then went out over the ocean and turned nose down as if he were going to dip into the ocean, expecting to hear them scream; still not a sound. Finally realizing that the best way to make any money was to go back and get another passenger, he glided down. As he did so, he said: "Now you can speak out."



The Professor: "I unearthed some of George III's coins at the back of your old brickyard."

Rustic: "Lor'! Oi wonder 'ow 'e come to drop 'em just there!"—London Opinion.

# ORATORICAL ALCHEMY

The four imperial elements Which ancient alchemy presents, These four we modern listeners hear When orators assail the ear.

The speaker formed of solid EARTH Has goodly and substantial worth; Facts and conclusions by the score Fasten and hold us—nothing more.

The orator conceived of AIR
Fills us with fancies cloudy, rare,
And wafts our souls on pinions light
In empty but ecstatic flight.

The speaker all of WATER wrought With moist and fructifying thought Expands ideas, bursts the rind, And starts a greening growth of mind.

But he, the orator of FIRE, Bids us exult, intend, aspire, And touches us with heavenly coal, Divine contagion of the soul.

O noble masters, worthy all, The least of you is nothing small; The chief of you, with flaming rod, Wields the creative power of God!

-Amos R. Wells.

Silence for a whole minute, and then the old gentleman replied: "You say I can speak now?"

\_\_\_\_\_

"Yes, you can speak now; you have earned your ride."

"Well, all I want to say is this: That when you glided up like a bird, I wanted to scream but I didn't, and when you turned somersaults in the air, I thought I'd have to holler, but I didn't. And then when you turned nose down like you was going into the ocean, I thought I'd be obliged to scream, but I didn't. But I want to tell you something—I'd liked to have screamed out when you dropped the old lady in the ocean"

#### TREACHEROUS TOOTING

Mr. W. T. H. Howe, managing director of the American Book Company, Cincinnati, Ohio, delegated Mr. Robert W. Smith to furnish us with a joke that is apropos and of general interest from the point of view of the teaching profession. His joke makes modesty a virtue and it certainly would be a very suitable joke to tell to a group of highschool boys who are inclined to braggadocio.

A certain colored gentleman found that he had gotten into a group which did not agree with his idea of his own prowess as a fighter. After having been given a good sound thrashing as a result of his boasting he addressed the little crowd as follows: "If you thinks you is a whale and ain't a whale, you better stay away from where the whales is."



#### Bausch & Lomb Projection Apparatus

The Bausch & Lomb Optical Company of Rochester, New York, has just issued a new catalog of 118 pages, illustrating and describing its apparatus and equipment for visual instruction. The catalog has been prepared especially for instructors and purchasing agents in schools and colleges who are faced with the problem of purchasing apparatus or equipment for visual education.

The catalog lists lantern slides, opaque projectors, film projectors, balopticons. daylight projectors, micro-projectors, together with photomicrographic and photographic lens equipment and accessories.

School officials who are interested in equipment for visual education may obtain further information by writing to the Bausch & Lomb Optical Company at Rochester, New York.

Wooster Safe-Groove Stair Treads and Nosings The Safety Stair Tread Company of Wooster, Ohio, has issued descriptive circulars describing the use of Wooster safe-groove treads for use on school stairs. The treads may be made of a variety of materials including concrete, marble, slate, tile, granite, iron, and they may be installed as new treads or as repaired or reconditioned treads. The replacement of stair treads is done easily and quickly, and without the interruption of traffic. The neat, snug-fitting tread applied to the original step makes the walking surface level, firm, and safe.

The firm issues detailed specification sheets and sample sections of all types of treads and nosings for the benefit of architects and school authorities. The sheets will be found valuable for replacement and repairwork as well as for new construction.

School authorities, or architects, who are interested in Wooster safety treads may obtain full information and prices by addressing the Safety Stair Tread Company, P. O. Box 198-A, at Wooster, Ohio.

#### Durabilt Lockers for Practical Locker Storage

The Durabilt Steel Eocker Company of Aurora, Illinois, has issued a new bulletin, No. 5043-A, illustrating a few typical applications of Durabilt products for the benefit of architects, engineers, and school authorities, who are confronted with the problem of determining the most practical and economical locker storage.

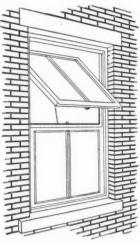
The bulletin shows single and double-tier lockers for corridors and gymnasiums, also sloping-top combination lockers in the double-row arrangement.

The Durabilt Company offers the services of its engineering department to any school official, architect, or engineer, who will write to the firm asking for this service.

#### New Fireproof Metal Window

The Milwaukee Corrugating Company of Milwaukee, Wisconsin, has announced the marketing of a new fireproof metal window of the pivoted and stationary type.

These metal windows have the approval of the fire underwriters' laboratories. They are made in several standard types, including the pivoted, hinged, stationary, double-hung, and counter-balanced types and are made with one, two, or three sashes to the window. All types are made in two patterns, the regular old-style pattern and the new daylight pattern. All standard sizes of windows are available and each window is inspected by a skilled engineer.



NEW MILCOR FIREPROOF WINDOW.

The windows are made of special stock No. 24 gauge galvanized flat sheet steel and the cutting is done by skilled workmen. In general use, these metal windows have been found effective in protecting buildings against the spread of fire and a good investment in the reduction of fire-insurance rates.

Full information about these fireproof windows will be given to any school official, or architect, who addresses the Milwaukee Corrugating Company at 36th Ave. and Burnham St., Milwaukee, Wis.

#### RADIO TALKS ON OPTICS

—The Bausch & Lomb Optical Company of Rochester, New York, has begun a series of radio talks through station WHAM at Rochester. The talks consume only five minutes of an hour's program and are given each Tuesday evening at 9:00 p.m. The first radio talk was on the effect of light on the human race and was a general introduction to the study of light and the eyes. The succeeding talks will take up the character of light, vision, and care of the eyes. An interesting feature of these radio talks is the story of the manufacture of optical glass from the raw material to the finished product. There will also be a short discourse on the care of the eyes.



# BEAUTY that inspires... Pride that endures!

HE school library, whether it be in a college, a university or a high school, is the *one* department which is used by *every* student and *every* member of the faculty. It is the place where personal initiative in research work can best be encouraged. It is the place where mind training reaches its highest degree of effectiveness through concentrated study and reading. For these reasons, modern educational institutions today are making the library the representative center of the campus atmosphere. It is planned so as to create an air of dignity, inspiration, and attraction.

The new University of Arizona Library Building at Tucson is the most beautiful building on the campus. A Library Bureau installation of specially designed library furniture adds to the inviting charm of its interior appointments. A Library Bureau artist-designer planned the equipment which shows Italian influence in keeping with the architecture of the building.

The University of Arizona previous to equipping their new library had had 21 years experience with Library Bureau furniture. In placing it in their new building they knew they were deciding upon equipment that in durability and suitability was past the experimental stage. Under date of February 4, 1921, the librarian of the University wrote of the installation in their old library as follows:

"We are glad to have an opportunity to express our complete satisfaction with Library Bureau furniture.

"The fine finish and artistic lines of these furnishings are at once apparent and it needs only the test of years to give convincing proof that the original cost though seemingly high, actually represents economy because of their greater durability. That installed in the University Library has now been in use for fifteen years and is still in excellent condition.

"In my experience I have not seen any other furniture that will withstand as uniformly the test of the peculiar climatic conditions of the southwestern states."

(Signed) ESTELLE LUTRELL,

Your school library, too, can be as equally attractive and inviting if equipped with Library Bureau library furniture, which for over fifty years has been the choice of the library profession everywhere.

Call in one of the L. B. experts. He will be only too glad to cooperate with your school board or your Architect, and will furnish plans and specifications in accordance with your wishes. A post card or a telephone call to any of these addresses will bring him:

118 Federal Street, Boston, Mass.; 451 Broadway, New York City; 214 W. Monroe Street, Chicago, Ill.; 759 South Los Angeles Street, Los Angeles, Calif.; 39 Second Street, San Francisco, Calif.; 447 Dexter-Horton Building, Seattle, Wash.; and 1903 Main Street, Dallas, Texas.

# Library Bureau

Division of Remington Rand

THERE IS NO SUBSTITUTE FOR L.B. QUALITY



# Lipman Refrigeration for New School

After consideration of various makes, a Lipman Full-Automatic Model 75 Refrigerating Machine has been installed in the new St. Michael's School at Dallas, Texas.

This machine refrigerates a  $4' \times 7' \times 8'$  box, providing a dry, constant cold that keeps the provisions perfectly.

#### **ELECTRIC REFRIGERATION**

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Lipman Machines are available in styles and capacities to fit every need. All models are noted for their compactness and completeness. They are clean, safe, dependable, and require little attention. They are quiet and they are efficient. Sales and Service Stations throughout the United States and Canada and in many foreign lands.

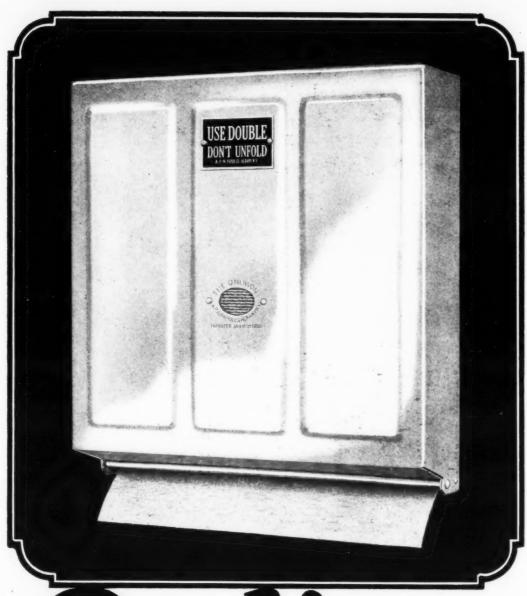
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THE DRY, CONSTANT COLD OF THE MOUNTAIN





# PAPER TOWELS

# Selected for Economy, Appearance and Quality

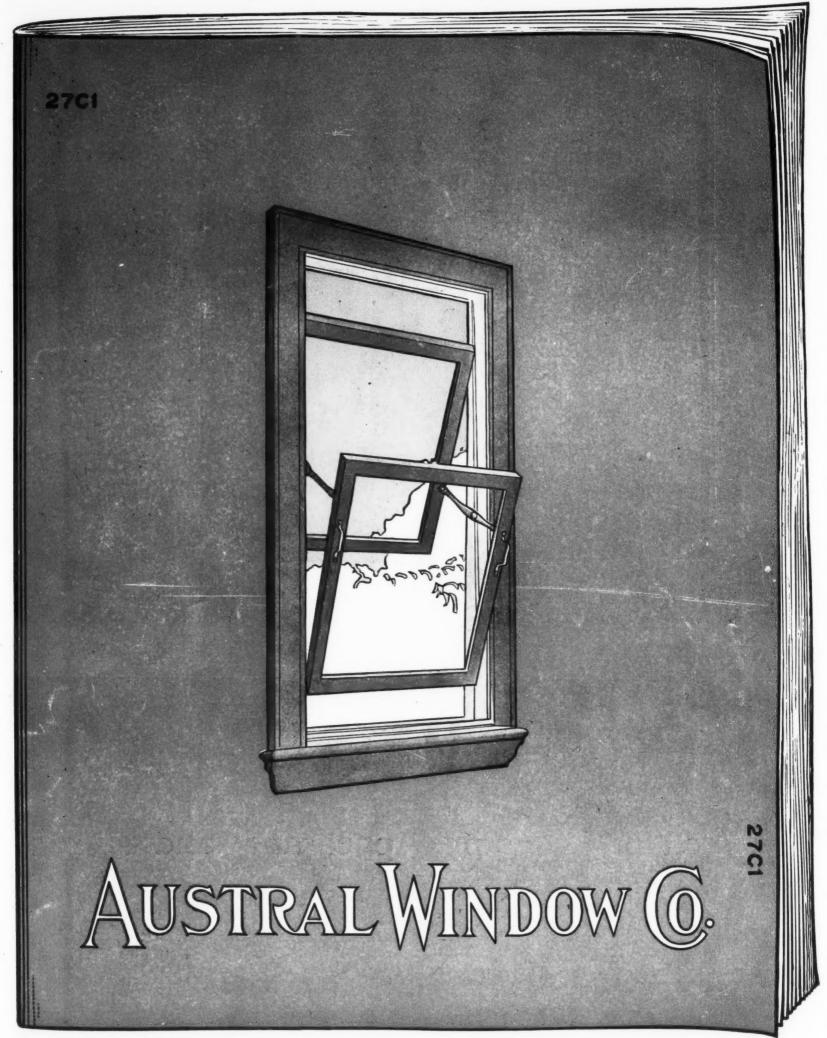
Onliwon Paper Towel Service has been selected for the washrooms of the largest towel users because of the fine appearance of the cabinets, the quality of the paper, and the ECONOMY of the service.

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